

**PRELIMINARY
RECOMMENDATIONS
BOARD OF GAME PROPOSALS**

March 2012-Region III

Alaska Department of Fish & Game

Division of Wildlife Conservation and Division of Subsistence

The department's recommendations are based on analysis of the proposals with available information. These recommendations may change after further analysis based on public comment or additional information.

PROPOSAL 33

EFFECT OF THE PROPOSAL: Increase the length of the wolverine hunting season in Unit 26 for residents and nonresidents from Sept. 1–Mar. 31 to Aug. 1–Mar. 31.

DEPARTMENT RECOMMENDATION: **Do Not Adopt.**

RATIONALE: Proposal 33 is for all of Unit 26, which is subdivided into Units 26A, 26B, and 26C. Unit 26A falls within Region V and was considered at the November 2011 Board meeting in Barrow. The Board did not adopt this proposal for Unit 26A. Units 26B and 26C will be considered at the March 2012 Region III Board meeting in Fairbanks.

Wolverine population surveys have never been conducted in Units 26B and 26C. However, observations while conducting aerial moose and caribou surveys and reports from hunters and trappers indicate that wolverine are common in these units. Sealing records indicate that harvest is low and variable. During regulatory years 2000–2001 through 2010–2011, reported harvest varied between 1–12 wolverines per year in Units 26B and 26C combined. Likely, a small proportion of the wolverines harvested by local residents were not sealed because they were used locally for clothing and crafts. Reported and non-reported harvest is likely below sustained yield.

Few wolverines are expected to be harvested in the August portion of the season; therefore, this regulatory change would be biologically sustainable. However, opening the wolverine season on August 1 in Unit 26 would create an inconsistency with the September 1 starting date in adjacent Units 26A and 25A. In addition, female wolverines with kits wean their young from late July through early August. Harvesting females with young in August may result in decreased survival rates of kits. The quality of wolverine fur in August is poor and many hunters and trappers prefer to have this resource available when the fur is of higher quality, later in the year.

PROPOSAL 131

EFFECT OF THE PROPOSAL: Add bear population reduction to the Unit 19A predation control program.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: This is a Department proposal originally submitted to the Board as a placeholder for the January 2012 statewide meeting. The Board deferred it to the March 2012 meeting. The Department recommends adopting this proposal with the following amendments that update information in the existing predation control plan, add lethal, aerial removal of any sex and age of bear by Department personnel, and delete snaring of bears by the department or the public.

5 AAC 92.125. Intensive Management Plans.

(a) Intensive management plans are established under this section in the areas described in this section.

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(e) **Unit 19(A) Predation Control Area:** the Unit 19(A) Predation Control Area is established and consists of those portions of the Kuskokwim River drainage within Unit 19(A), encompassing approximately 9,969 square miles; this predator control program does not apply within National Park Service or National Wildlife Refuge lands unless approved by the federal agencies; notwithstanding any other provision in this title, and based on the following information, the commissioner or the commissioner's designee may conduct a wolf **and a black bear and brown bear** population reduction or wolf **and black bear and brown bear** population regulation program in the Unit 19(A) Predation Control Area:

(1) the following Predation Control Focus Areas are established in Unit 19(A):

(A) a Unit 19(A) Wolf Predation Control Focus Area (WCFA) is established and consists of approximately 3,913 square miles generally within the Holitna, Hoholitna, and Stony River drainages; the purpose is to focus wolf control in a relatively small area where moose are accessible to hunters, rather than spread this effort over the entire game management unit; wolf control will be conducted only within the WCFA; the department will have the discretion to adjust its size and shape up to 40 percent (approximately 4,000 square miles) of Unit 19(A);

(B) a Unit 19(A) Black Bear and Brown Bear Predation Control Focus Area (BCFA) is established and consists of those portions of the Kuskokwim River drainage within the area starting at Sleetmute at 61° 42.00' N. lat., 157° 10.00' W. long., then east to 61° 42.00' N. lat., 157° 00.00' W. long., then north to 61° 44.00' N. lat., 157° 00.00' W. long., then east to 61° 44.00' N. lat. 156° 55.00' W. long., then north to 61° 46.00' N. lat., 156° 55.00' W. long., then east to 61° 46.00' N. lat. 156° 50.00' W. long., then north to 61° 48.00' N. lat., 156° 50.00' W. long., then east to 61° 48.00' N. lat., 156° 45.00' W. long., then north to 61° 50.00' N. lat., 156° 45.00' W. long., then east to 61° 50.00' N. lat., 156° 30.00' W. long., then south to 61° 40.00' N. lat., 156° 30.00' W. long., then west to 61° 40.00' N. lat., 156° 45.00' W. long., then south to 61° 18.00' N. lat., 156° 45.00' W. long., then west to 61° 18.00' N. lat., 157° 15.00' W. long., then north to 61° 24.00' N. lat., 157° 15.00' W. long., then east to 61° 24.00' N. lat., 157° 10.00' W. long., then north to 61° 42.00' N. lat., 157° 10.00' W. long., encompassing approximately 540 square miles; the purpose is to focus bear control in an area where moose are accessible to hunters, rather than spread this effort over the entire game management unit; bear control will be conducted only within the BCFA; the department will have the discretion to adjust its size and shape by 40 percent (approximately 325 – 750 square miles); the BCFA is generally within the WCFA;

(2) [(1)] the discussion of wildlife population and human use information is as follows:

(A) prey population information is as follows:

(i) a Central Kuskokwim [VILLAGES] moose management area (MMA) is established within **the same area as the WCFA and includes the BCFA;** [UNIT 19(A) PREDATION CONTROL AREA, ENCOMPASSING APPROXIMATELY 3,913 SQUARE MILES GENERALLY WITHIN THE HOLITNA, HOHOLITNA, AND STONY RIVER DRAINAGES] the purpose of the MMA is to **designate an area where moose numbers are closely monitored and objectives for number of moose and moose harvest can be applied; the department may adjust the size and shape of the MMA;** [FOCUS INTENSIVE MANAGEMENT ACTIVITIES, INCLUDING PREDATOR CONTROL AND HABITAT MANAGEMENT, IN A RELATIVELY SMALL AREA WHERE MOOSE ARE ACCESSIBLE TO HUNTERS, RATHER THAN SPREAD THIS EFFORT OVER THE ENTIRE GAME MANAGEMENT UNIT; WOLF CONTROL WILL BE CONDUCTED ONLY WITHIN THE MMA, AND THE DEPARTMENT WILL HAVE THE DISCRETION TO ADJUST ITS SIZE AND SHAPE UP TO 40 PERCENT (APPROXIMATELY 4,000 SQUARE MILES) OF UNIT 19(A);]

(ii) the moose population size for Unit 19(A) was estimated in March 2004, based upon earlier estimates of density in portions of the unit; in March 1998, 1.25 moose per square mile (plus or minus 14 percent at an 80 percent confidence interval) was estimated in a portion of the Holitna-Hoholitna drainage; in March 2001, 0.7 moose per square mile (plus or minus 21 percent at a 90 percent confidence interval) was estimated in a portion of the Aniak River drainage; extrapolation of data from both estimates to all of Unit 19(A) resulted in an estimated total population size of 4,300 - 6,900 moose; the population size for Unit 19(A) was updated in February 2005, based upon an estimate of 0.27 moose per square mile (plus or minus 16 percent at a 90 percent confidence interval) obtained from a survey in the portion of the unit south of the Kuskokwim River; extrapolation of **these** [THIS] data to all of Unit 19(A) resulted in an estimated total population size of 3,000 - 4,000 moose (0.3 - 0.4 moose per square mile), which was corrected for sightability of moose and was lower than the 2004 estimate indicating moose numbers had declined; the population size estimate was updated in March 2006, based on an estimate of 0.39 moose per square mile (plus or minus 15 percent at a 90 percent confidence interval) obtained from a survey conducted south of the Kuskokwim River, from Kalskag to the mouth of Crooked Creek (3,440 square miles); extrapolation of these data to all of Unit 19(A) resulted in a estimated total population size of 2,700 - 4,250 moose (0.27 - 0.42 moose per square mile), which was also corrected for sightability; the population size was updated again in March 2008, based on an estimate of 0.55 moose per square mile (plus or minus 28 percent at the 90 percent confidence interval) obtained within a 3,874 square mile moose survey area located south of the Kuskokwim River, within the Holitna, Hoholitna, and Stony River drainages; extrapolation of these data to all of Unit 19(A) resulted in an estimated total population size of 3,200 - 5,275 moose (0.32 - 0.53 moose per square mile), which was corrected for sightability; **the population size was updated in March 2011, based on an estimate of 0.43 moose per square mile (plus or minus 36 percent at the 90 percent confidence interval) obtained within a 3,874 square mile moose survey**

area located south of the Kuskokwim River, within the Holitna, Hoholitna, and Stony River drainages; extrapolation of these data to all of Unit 19(A) resulted in an estimated total population size of 2,791 - 5,782 moose (0.28 - 0.58 moose per square mile), which was corrected for sightability;

(iii) in November 2001, a survey on the Holitna-Hoholitna Rivers in Unit 19(A) was conducted; a total of 196 moose were classified with an observed bull-to-cow ratio of 6:100 and an observed calf-to-cow ratio of 8:100; the low numbers observed could have been influenced by an atypical moose distribution caused by shallow snow and relatively temperate late-fall weather;

(iv) in November 2004, a survey was conducted to estimate composition in the Holitna-Hoholitna, Oskawalik, and Stony River portion of Unit 19(A) (4,828 square miles); a total of 226 moose were classified and the bull-to-cow ratio (19:100, plus or minus 76 percent at a 90 percent confidence interval) and calf-to-cow ratio (32:100, plus or minus 38 percent at a 90 percent confidence interval) estimates were higher than observed in the November 2001 trend count survey; some improvement in the ratios is indicated; however, results of the two surveys cannot be directly compared because the 2004 survey covered a much larger geographic area and was done using different methods than the 2001 survey; the estimated percent moose calves in the total population during the November 2004 composition survey was 22 percent (plus or minus 38 percent with a 90 percent confidence interval);

(v) in November 2005, composition surveys were conducted in the Holitna-Hoholitna drainage in Units 19(A) and 19(B) and in the Aniak River drainage including the Kuskokwim River from Lower Kalskag to Napaimiut in Unit 19(A); a different technique was implemented than what was used for previous composition surveys because of the concern about possible atypical moose distribution when confining the survey area to the river corridor and the concern about wide confidence intervals in the November 2004 survey; a total of 307 moose were observed and the observed bull-to-cow ratio was 8:100 with most (12 of 19) bulls classified as yearlings; the observed calf-to-cow ratio was 24:100 and the percent of calves was 18 percent; the low bull-to-cow ratios observed during the past three composition surveys indicate that hunting pressure has been high in the Holitna-Hoholitna drainage; in the western portion of Unit 19(A), the Aniak River drainage and the Kuskokwim River from Lower Kalskag to Napaimiut was also surveyed; composition data had not been collected previously in this portion of Unit 19(A); a total of 410 moose were counted with an observed bull-to-cow ratio of 20:100 and an observed calf-to-cow ratio of 23:100;

(vi) in November 2007, composition surveys were conducted in the Holitna-Hoholitna drainage in Unit 19(A) and in the Aniak River drainage downriver from the Buckstock River including the Kuskokwim River from Lower Kalskag to Aniak in Unit 19(A); in the Holitna-Hoholitna drainage a total of 200 moose were observed, the bull-to-cow ratio was 35:100, the calf-to-cow ratio was 45:100, and the percent of calves was 25 percent; in the Aniak River drainage a total of 122 moose were observed, the bull-to-cow ratio was 28:100, the calf-to-cow ratio was 51:100, and the percent of calves was

29 percent; in November 2008, composition surveys were again conducted in the same area; in the Holitna-Hoholitna drainage a total of 117 moose were observed, the bull-to-cow ratio was 34:100, and the calf-to-cow ratio was 27:100, and the percent of calves was 18 percent; in the Aniak River drainage a total of 51 moose were observed, the observed bull-to-cow ratio was 42:100, and the observed calf-to-cow ratio was 23:100, and the percent of calves was 14 percent;

(vii) in November 2009, composition surveys were conducted in the Holitna-Hoholitna drainage; a total of 129 moose were observed, the bull-to-cow ratio was 51:100, the calf-to-cow ratio was 36:100, and the percent of calves was 19; in November 2010, composition surveys were conducted in the Holitna-Hoholitna drainage a total of 212 moose were observed, the bull-to-cow ratio was 48:100, the calf-to-cow ratio was 19:100, and the percent of calves was 11; in November 2011, composition surveys were conducted in the Holitna-Hoholitna drainage; a total of 164 moose were observed, the bull-to-cow ratio was 38:100, the calf-to-cow ratio was 31:100, and the percent of calves was 18;

(viii) [(VII)] birth rate among radiocollared cows in Unit 19(A) is high; in 2005, of nine radiocollared cows in the lower Holitna River, three had twins, four had a single calf, and two had no calf (78 percent birth rate); of eight radiocollared cows in the Aniak River drainage, two had twins and six had single calves (100 percent birth rate); overall, the 2005 birth rate among radiocollared cows in Unit 19(A) was 88 percent; combined data from twinning surveys in the Holitna during 2007, 2008, and 2010, indicate 12 of 19 cows with calves had twins (63% twinning rate);

(ix) [(VIII)] a late winter survey to estimate calf survival, conducted in April 2003 in Unit 19(A), resulted in an estimate of 7.6 percent calves in the moose population in Holitna-Hoholitna drainage (sample size 107 adults and 9 short-yearlings) and 8.9 percent in the moose population in the Aniak River drainage (sample size 61 adults and six short-yearlings); spring population surveys conducted south of the Kuskokwim River drainage and west of the Holitna-Hoholitna drainage (3,440 square miles) in 2006, resulted in 17 percent calves and 9 percent calves respectively (plus or minus 30 percent at a 90 percent confidence interval); the calf-to-cow ratios in fall and the percent of calves found in spring surveys support the conclusion that calf survival in the moose population is very low, and a decline in moose numbers is probably occurring;

(x) [(IX)] based on current estimates of recruitment, population density and bull-to-cow ratios, there is no harvestable surplus in eastern Unit 19(A) (upstream from and excluding the George River), excluding the Lime Village Management Area; in western Unit 19(A) (downstream from and including the George River), the harvestable surplus is 60 bulls, using a conservative harvest rate for bulls that is based on three percent of the total estimated population;

(xi) [(X)] the intensive management moose population objective established by the board for Units 19(A) and 19(B) is 13,500 - 16,500 moose; based on the relative sizes of the two units, the proportional population objective for Unit 19(A) alone is 7,600 -

9,300 moose; the intensive management moose harvest objective for Units 19(A) and 19(B) is 750 - 950 moose; the proportional harvest objective for Unit 19(A) alone is 400 - 550 moose; achieving the population and harvest objectives for Unit 19(A) will contribute to achieving the intensive management population and harvest objectives established for Units 19(A) and 19(B);

(xii) [(XI)] based on data available, habitat is probably not a factor limiting population growth in moose in the central Kuskokwim region; a browse survey in Unit 19(D) (in the upper Kuskokwim River) during spring 2001, found that moose were removing about 16 percent of current annual growth; these removal rates are near the midpoint of the range observed in areas of low to high moose browse use (9 - 42 percent); a browse survey in fall 2002 below Lower Kalskag on the Kuskokwim River (Unit 18) found that 78 percent of shrubs were unbrowsed and none were heavily browsed by moose; there is some indication that cows are in average or good body condition because twinning rates of 32 percent were observed in spring 2000 on the Holitna and Hoholitna Rivers, although sample sizes were small (less than 10); of 15 radiocollared cows in Unit 19(A) that had calves in 2005, five produced twins for a 33 percent twinning rate; **in 2007, 2008, and 2010 a combined twinning rate of 63% was observed**; if observations of browsing upriver and downriver from Unit 19(A), and limited observations of twinning are indicative of the situation in Unit 19(A), habitat enhancement alone is unlikely to cause a significant population increase in moose in the foreseeable future; the highest quality moose habitat in the unit is found in the lower Holitna River floodplain; high quality habitat is present in riparian areas along the Kuskokwim River and adjacent drainages; other portions of Unit 19(A) have lower quality habitat;

(xiii) [(XII)] total estimated mortality is likely high relative to the size of the moose population; information gained from studies on moose mortality in Unit 19(D)-East and other similar areas of Alaska, and observations by local residents indicate that wolves are currently a major limiting factor for moose in Unit 19(A); research from Unit 19(D)-East also indicates that black and brown bear predation is likely a factor that contributes to limiting the moose population in Unit 19(A); of 38 adult moose radiocollared in October 2003, seven had died by November 2005; moose mortality from harvest by humans is also high, relative to the population size, and regulatory proposals have been submitted to severely restrict harvest;

(xiv) [(XIII)] the number of animals that can be removed from the Unit 19(A) moose population on an annual basis without preventing growth of the population or altering the composition of the population in a biologically unacceptable manner is less than the harvest objective established for the population in 5 AAC 92.108; the moose population in Units 19(A) and 19(B) is well below the intensive management objective set by the board; the moose population in Unit 19(A) is also well below the objective calculated by the department for the unit;

(xv) [(xiv)] without an effective wolf **and black bear and brown bear** predation control program, moose in Unit 19(A) are likely to persist in a low density dynamic equilibrium state with little expectation of increase; data from moose mortality studies,

and predator and prey studies, conducted throughout Alaska and similar areas in Canada suggest that reducing the number of wolves **and bears** in Unit 19(A) can reasonably be expected to increase the survival of calves as well as older moose, particularly yearlings; reducing wolf **and bear** predation on moose, in combination with reducing harvest, particularly of cows, can reasonably be expected to initiate an increase of the moose population towards the population objective;

(B) the human use information for prey population is as follows:

(i) the division of subsistence conducted household surveys on the subsistence use of big game in communities in Unit 19(A) between April 2003 and March 2004; moose was the most widely used and hunted animal in all eight communities surveyed; overall, 76 percent of all households in the central Kuskokwim area used moose, 57 percent of all households attempted to harvest moose, and 22 percent of all households successfully harvested one or more moose; of the estimated 107 moose harvested by the eight survey communities, 64, or 60 percent, were taken in Unit 19(A), 14 or 13 percent, were taken in Unit 18, and the remainder 27 percent were taken in other subunits of Unit 19 or in unreported locations; an estimated 426 individuals, or 28 percent of the area population, spent a total of 4,591 hunter days in pursuit of moose; to put this number in perspective, it is equivalent to a period of nearly 12.6 years, a clear testament to the importance of moose as a subsistence resource in the central Kuskokwim region; of the 426 individuals who went hunting, only 96, or 23 percent, were successful in harvesting a moose; the average number of days spent hunting by successful households per moose harvested (14.7) is higher than any previously reported numbers in the state where similar methods of data collection and analysis were employed; households were asked to compare their 2003 - 2004 harvest of moose with their harvest both five years and 10 years before, and the householders overwhelmingly noted harvesting fewer moose in 2003 - 2004;

(ii) between June 1982 and June 1983, the staff of the division of subsistence conducted extensive research on the resource use patterns and community characteristics of Chuathbaluk and Sleetmute; a comparison of that information with the 2004 data indicates a significant decline in household harvest rates; from an average of 0.55 - 0.2 moose harvested per household in Chuathbaluk and from 0.68 - 0.3 moose harvested per household in Sleetmute;

(iii) residents of Unit 19(A) have always had a high demand for moose for subsistence needs; since the 1990s when larger boats became available to residents in the lower Kuskokwim River and income from commercial fishing increased the ability to purchase fuel for long hunting trips, demand for moose in Unit 19(A) has increased; since 2004, there has been a moratorium on moose hunting in the Kuskokwim River drainage in Unit 18 and this has increased the demand for moose for subsistence purposes in Unit 19(A);

(iv) the amount necessary for subsistence established by the board for Unit 19 (including the Lime Village Management Area) is 430 - 730 moose; most of the human

population in Unit 19 is residents of communities along the Kuskokwim River in Unit 19(A); the amount necessary for subsistence for Unit 19 is also based on subsistence need by residents of Unit 18; Unit 19(A) includes the most accessible portion of Unit 19 for the main population base in the region; subsistence hunters have depended on Unit 19(A) to provide the majority of subsistence harvest in Unit 19 as a whole; harvest in Unit 19(A) is a critical component of the amount necessary for subsistence for Unit 19 and the ability to meet subsistence needs in the region;

(v) according to harvest ticket reports, the numbers of hunters and moose harvested declined substantially between the mid-1990s and 2002; the total reported moose harvested in Unit 19(A) declined from the 1994 - 1995 season (168 moose) to the 2002 - 2003 season (67 moose); in Unit 19(A), the number of moose reported harvested by local residents and other Alaska residents declined approximately 65 percent, from 138 moose to 48 moose, between 1994 - 1995 and 2002 - 2003; after the RM 640 registration permit hunt for Alaska residents was implemented in fall 2004, harvest reporting greatly improved; in 2004, reports indicate that 107 moose were harvested in Unit 19(A); during the fall of 2005, 176 moose were reported harvested; while it may appear that moose harvest increased significantly after the registration permit hunt was established, the increase is most likely attributable to better reporting rates; during 2006, 2007, and 2008, reported moose harvest was 43, 77, and 75, respectively; **during 2009 and 2010, the reported moose harvest was 58 and 84, respectively;** these lower harvests were influenced by Tier II hunt restrictions and moose hunting closures;

(vi) the average number of nonresident hunters in Unit 19(A) between 1994 - 1995 and 2002 - 2003 was 52 hunters; the peak number of nonresident hunters was 91 in 2000 - 2001; when Unit 19(A) was closed to nonresident hunting in March 2004 several guides protested vigorously that their agreements with clients could not be met and their businesses would suffer; since that time demand for nonresident hunting opportunity has not been met;

(vii) demand for moose harvest in Unit 19(A) is likely to increase in the future; if the moose hunting moratorium in Unit 18 is successful in increasing the moose population in that area it will help relieve some of the demand on Unit 19(A); still, with more than 20,000 residents in Unit 18 there will be high demand for moose throughout the region indefinitely into the future; clearly, demand is not being met now; if the wolf **and black bear and brown bear** control program is successful it will help to meet the need for moose in the region in the future; without a wolf **and black bear and brown bear** predation control program, there is a very low probability that the moose population will increase sufficiently to meet subsistence needs or other harvest demands in the future;

(C) the predator population information is as follows:

(i) the pre-control wolf population in Unit 19(A) was estimated in fall 2004 using an extrapolation technique combined with sealing records and anecdotal observations the population in the entire 9,969 square mile area was estimated at 180 - 240 wolves in 24

- 28 packs or approximately 1.8 - 2.4 wolves per 100 square miles; a revised pre-control estimate of 125 - 150 was calculated in 2006 because wolf survey data collected during early 2006 and moose survey data collected during 2005 and 2006 indicated the initial pre-control wolf population estimate was too high;

(ii) after a complete wolf survey was conducted in Unit 19(A) in January and March 2006, a total of 107 - 115 wolves was estimated in 26 - 27 packs or approximately 1.1 - 1.2 wolves per 100 square miles; a complete wolf survey was conducted again in Unit 19(A) in February 2008, a total of 74 wolves was estimated in 17 packs or approximately 0.74 wolves per 100 square miles; **in February 2011, aerial wolf surveys, pilot interviews, and harvest and control data were used to obtain fall 2010 estimates of 30 wolves in 7 packs in Unit 19(A) upriver of Sleetmute and approximately 80 wolves in all of Unit 19(A);** in areas with limited human developments, habitat is not considered a significant factor in limiting wolf populations and it is presumed that numbers of wolves are limited mainly by prey availability; there is no evidence of disease or any other naturally occurring factors that would cause wolf mortality to be higher than normally expected;

(iii) using the **2011** [2008] moose and wolf population estimates, the moose-to-wolf ratio in Unit 19(A) is between **35-72:1** [43:1 AND 71:1];

(iv) when present, the Mulchatna caribou herd provides an alternative source of prey for wolves in Unit 19(A); because migrations of the herd into portions of 19(A) vary each year, the herd is not consistently available to wolves in the plan area;

(v) studies in Alaska and elsewhere have repeatedly concluded that large reductions are required to affect wolf population levels and to reduce predation by wolves on their prey; research indicates a reduction of about 60 - 80 percent of the pre-control wolf population may be necessary to achieve prey population objectives; once the wolf population has been reduced to the population control objective, annual reductions of less than 60 percent will likely regulate the wolf population at the control objective; the wolf population control objective during winters 2004 - 2005 and 2005 - 2006 was 40 - 53 wolves in order to achieve a reduction of between 60 and 80 percent of the pre-control estimate of 180 - 240; beginning in winter 2006 - 2007, the wolf population control objective was changed to 30 - 36 wolves based on the revised pre-control wolf population estimate of 125 - 150; the minimum wolf population control objective will achieve the desired reduction in wolf predation, and also ensure that wolves persist within the plan area;

(vi) without a wolf predation control program, the wolf population is expected to decline somewhat due to further decline in the moose population and reduced availability of prey; the moose and wolf populations in Unit 19(A) are in a low density dynamic equilibrium state where both predator and prey numbers are likely to stay at low levels indefinitely; if wolf predation control efforts continue and the wolf population is reduced according to the wolf population and harvest objectives, the wolf population will be maintained at 30 - 36 wolves for several years, but once the moose

population increases and wolf control efforts are discontinued, the wolf population will increase in response to the increased prey base;

(vii) based on extrapolation of densities from other areas, an estimated 2,475 – 2,970 black bears exist in Unit 19(A), including approximately 135 – 160 black bears within the BCFA;

(viii) based on extrapolation of densities from other areas, an estimated 200 brown bears exist in Unit 19(A), including approximately 10 – 15 brown bears within the BCFA;

(D) the human use information for the predator population is as follows:

(i) total reported harvest of wolves in Unit 19(A) by both hunters and trappers between 1998 and 2004 ranged between 21 and 49 wolves; during the winter of 2004 - 2005, a total of 72 wolves were reported taken in Unit 19(A); of those, 43 wolves were taken in the wolf predation control program and 29 wolves were taken by trappers and hunters; during the winter of 2005 - 2006, a total of 80 wolves were reported taken in Unit 19(A); of those, 47 wolves were taken in the wolf predation control program, and 33 wolves were taken by trappers and hunters; during the winter of 2006 - 2007, a year with low snow and poor travel conditions, a total of 10 wolves were reported taken in Unit 19(A); of those, seven wolves were taken in the wolf predation control program and three wolves were taken by trappers and hunters; during the winter of 2007 - 2008, a total of 24 wolves were reported taken in Unit 19(A); of those, 15 wolves were taken in the wolf predation control program and nine wolves were taken by trappers and hunters; **during the winter of 2008 - 2009, a total of 31 wolves were reported taken in Unit 19(A); of those, 20 were taken in the wolf predation control program and 11 were taken by trappers and hunters; during the winter of 2009 - 2010, a year with low snow and poor travel conditions, a total of 12 wolves were reported taken in Unit 19(A); of those, 2 wolves were taken in the wolf predation control program and 10 wolves were taken by trappers and hunters; during the winter of 2010 - 2011, a total of 14 wolves were reported taken in Unit 19(A); of those, 10 wolves were taken in the wolf predation control program and 4 wolves were taken by trappers and hunters; it is likely that a few additional wolves (estimated 5 – 10 annually) are harvested in the area, but are used locally and do not get sealed and reported;** [IT IS LIKELY THAT A FEW ADDITIONAL WOLVES (ESTIMATED 5 - 10) ARE HARVESTED IN THE AREA, BUT ARE USED LOCALLY AND DO NOT GET SEALED AND REPORTED;]

(ii) the human population in Unit 19(A) is concentrated along the Kuskokwim River corridor; there are large portions of the unit that are remote from communities in the region and access is difficult; the central Kuskokwim region weather is influenced by coastal conditions and often warm spells in the winter will melt snow and make travel and tracking conditions poor; in addition, the low price of wolf pelts and cost of fuel make it difficult for local residents to harvest a high number of wolves throughout the unit;

(iii) in the first year of the Unit 19(A) wolf predation control program reported wolf harvest by hunters and trappers was 27 wolves, within the range of previous years' harvest; without a wolf predation control program in place wolf harvest is expected to remain relatively constant;

(iv) there is no reporting requirement for black bears harvested in Unit 19(A) and hunter harvest is believed to be low; without a black bear predation control program in place black bear harvest is expected to remain relatively constant;

(v) during 2006 – 2010, a total of 77 brown bears were reported harvested by hunters from Unit 19(A), including an average of 3 per year from the Holitna River drainage; without a brown bear predation control program in place brown bear harvest is expected to remain relatively constant;

(2) the predator and prey population levels and population objectives, and the basis for those objectives, is as follows:

(A) the **2011** [2008] estimated moose population in Unit 19(A) is **2,791 - 5,782** [3,200 - 5,275] moose; the moose population objective for Unit 19(A) is 7,600 - 9,300 moose; this objective is based on the intensive management objective for Units 19(A) and 19(B) established by the board and the proportion of the land area in the combined subunits that is within Unit 19(A); intensive management objectives were based on historical information about moose numbers, carrying capacity of the habitat, sustainable harvest levels, and human use;

(B) the revised pre-control estimated wolf population in Unit 19(A) was 125 - 150 wolves during fall 2004; studies in Alaska and elsewhere have repeatedly concluded that large, annual reductions of wolves are required to diminish wolf population levels and predation by wolves on their prey; consistent with scientific studies and department experience, the objective of this plan is to substantially reduce wolf numbers from pre-control levels in order to relieve predation pressure on moose and allow for improved recruitment to the moose population; this plan also has as a goal to maintain wolves as part of the natural ecosystem within the described geographical area; to achieve the desired reduction in wolf predation, but ensure that wolves persist within the plan area, the wolf population in Unit 19(A) will be reduced by no fewer than 30 wolves;

(C) the wolf population control objective for Unit 19(A) is 30 - 36 wolves; a minimum population of 30 wolves is within the 60 - 80 percent recommended reduction from the pre-control minimum estimated wolf population; the minimum wolf population control objective will achieve the desired reduction in wolf predation, and also ensure that wolves persist within the plan area;

(D) the pre-control estimated black bear population in Unit 19(A) was 2,475 – 2970 bears, including 135 – 160 black bears within the BCFA; the objective for the black bear predation control program is to reduce black bear numbers and black bear predation on moose to the lowest level possible within the BCFA; this plan includes a

goal to maintain black bears as part of the natural ecosystem within Unit 19(A); because the BCFA is a relatively small geographic area, removing black bears from within it will have only a minor effect on the black bear population in Unit 19(A) overall, but should significantly contribute to moose calf survival in the BCFA;

(E) the pre-control estimated brown bear population in Unit 19(A) was 200 bears, including 10 – 15 brown bears within the BCFA; the objective for the brown bear predation control program is to reduce brown bear numbers and brown bear predation on moose to the lowest level possible within the BCFA; this plan includes a goal to maintain brown bears as part of the natural ecosystem within Unit 19(A); because the BCFA is a relatively small geographic area, removing brown bears from within it will have only a minor effect on the brown bear population in Unit 19(A) overall, but should significantly contribute to moose calf survival in the BCFA;

(3) the justifications for the predator control implementation plan are as follows:

(A) the estimated **2011** [2008] density of the moose population in Unit 19(A) is in the range of **0.28 – 0.58** [0.32 - 0.53] moose per square mile with a population of **2,791 - 5,782** [3,200 - 5,275] moose; based on current estimates of recruitment, density, and bull-to-cow ratios, there is no harvestable surplus in eastern Unit 19(A) (upstream from and excluding the George River), excluding the Lime Village Management Area; in western Unit 19(A) (downstream from and including the George River), the harvestable surplus is 60 bulls, using a conservative harvest rate for bulls that is based on three percent of the estimated population; harvestable surplus is not sufficient to provide the amount of moose necessary for subsistence purposes or provide for nonsubsistence uses; the moose population and harvest objectives for Unit 19(A) are not being met because mortality has exceeded recruitment into the population causing a decline in moose numbers; wolf, **black bear and brown bear** predation is an important cause of moose mortality;

(B) kill rates by wolves are affected by availability of moose, snow depth, number of alternate prey, size of wolf packs, and other local factors; in Alaska and Canada where moose are the primary prey of wolves, studies documented kill rates ranging from four to seven moose per wolf per winter;

(C) black bear and brown bear predation is likely a major cause of moose calf mortality; in nearby Unit 19D-East, a 96 percent and 50 percent reduction in black bears and brown bears, respectively, resulted in increased survival rates during summer;

(D) [C] reducing wolf, **black bear and brown bear** numbers through a wolf, **black bear and brown bear** predation control program, combined with reduction in moose harvest is the approach most likely to succeed in a recovery of the moose population; wolf harvest through hunting and trapping efforts **and black bear and brown bear through hunting efforts** has not resulted in lowering the wolf, **black bear and brown bear** populations sufficiently to allow the moose population to grow; a regulation change in March 2002 to allow the use of snowmachines to take wolves has not resulted in a measurable increase in

wolf harvest; public information and education programs have been implemented in the central Kuskokwim region to improve understanding of the biological effect of killing cow moose and the potential benefits to the moose population of increasing harvest of wolves and bears; education should help in the long-term but is not expected to result in a significant increase in the moose population in the short-term; Unit 19(A) was closed to nonresident hunting and a registration permit system for resident hunters was established in 2004; beginning in fall 2006, moose hunting was closed upstream from and excluding the George River drainage and excluding the Lime Village Management Area; a Tier II permit hunt was implemented downstream from and including the George River drainage; these changes were made in response to new information obtained during 2005 surveys;

(E) [D] presently known alternatives to predator control for reducing the number of predators are ineffective, impractical, or uneconomical in the Unit 19(A) situation; hunting and trapping conducted under authority of ordinary hunting and trapping seasons and bag limits is not an effective reduction technique in sparsely populated areas such as Unit 19(A); the numbers of hunters and trappers are relatively low and educational programs to stimulate interest and improve skills in taking wolves are in the early stages of development, and so far have been unsuccessful in increasing the harvest of wolves; the inherent wariness of wolves, difficult access, and relatively poor pelt prices also explain low harvest rates; application of the most common sterilization techniques, including surgery, implants, or inoculation, are not effective reduction techniques because they require immobilization of individual predators, which is extremely expensive in remote areas, relocation of wolves, **black bears and brown bears** is impractical because it is expensive and it is very difficult to find publicly acceptable places for relocated wolves, **black bears and brown bears**; habitat manipulation is ineffective because it may improve the birth rate of moose in certain circumstances, but it is poor survival, not poor birth rate that keeps moose populations low in rural areas of interior Alaska; supplemental feeding of wolves and bears as an alternative to predator control has improved moose calf survival in two experiments; however, large numbers of moose carcasses are not available for this kind of effort and transporting them to remote areas of Alaska is not practical; stocking of moose is impractical because of capturing and moving expenses; any of the alternatives to a wolf predation control program are not likely to be effective in achieving the desired level of predator harvest;

(F) [E] moose hunting seasons and bag limits have been reduced in Unit 19(A); in 2004 - 2005, the nonresident season in Unit 19(A) was closed and resident hunters in Unit 19(A) were required to have a registration permit; the resident winter moose hunting season in Unit 19(A) was eliminated to reduce overall harvest and eliminate incidental cow harvest to improve the reproductive potential of the population; beginning in fall 2006, moose hunting in the eastern part of Unit 19(A) outside the Lime Village Management Area was closed and the remainder of Unit 19(A) was limited by Tier II permit; while helpful, these measures alone will not likely stop the decline in the moose population and they will not be enough alone to allow the moose population to increase;

(G) [F] without an effective wolf, **black bear and brown bear** predation control program, the wolf, **black bear and brown bear** harvest objectives cannot be achieved and moose in

Unit 19(A) are likely to persist in a low density dynamic equilibrium state with little expectation of increase; data from moose mortality studies, and predator and prey studies, conducted throughout Alaska and similar areas in Canada suggest that reducing the number of wolves, **black bears and brown bears** in Unit 19(A) can reasonably be expected to increase the survival of calves as well as older moose; reducing wolf, **black bear and brown bear** predation on moose, in combination with reducing harvest, particularly of cows, can reasonably be expected to initiate an increase of the moose population towards the population objective; aerial wolf predation control makes it possible to increase the take of wolves over large expanses of territory in a vast and remote region like the majority of Unit 19(A); **aerial black bear and brown bear control is an effective technique for reducing bear numbers and bear predation on moose;** with a reduction in wolf **and bear**-caused mortality and restrictions in harvest, the moose population is expected to grow;

(4) the permissible methods and means used to take wolves, **black bears and brown bears** are as follows:

(A) hunting and trapping of wolves **and hunting of black bears and brown bears** by the public in Unit 19(A) during the term of the program will occur as provided in the hunting and trapping regulations set out elsewhere in this title, including use of motorized vehicles as provided in 5 AAC 92.080;

(B) notwithstanding any other provisions in this title, the commissioner may issue public aerial shooting permits or public land and shoot permits as a method of wolf removal under AS1605.783;

(C) notwithstanding any other provisions in this title, the commissioner may reduce the black bear population within the BCFA using department employees to conduct aerial, land and shoot, and/or ground based lethal black bear removal of any sex and age of black bear using state owned, privately owned, or chartered equipment, including helicopters under AS1605.783;

(D) notwithstanding any other provisions in this title, the commissioner may reduce the brown bear population within the BCFA using department employees to conduct aerial, land and shoot, and/or ground based lethal brown bear removal of any sex and age of brown bear using state owned, privately owned, or chartered equipment, including helicopters under AS1605.783;

(5) the anticipated time frame and schedule for update and reevaluation are as follows:

(A) for up to five years beginning on July 1, 2009, the commissioner may reduce the wolf, **black bear and grizzly bear** populations in Unit 19(A);

(B) annually, the department shall to the extent practicable, provide to the board at the board's spring board meeting, a report of program activities conducted during the preceding

12 months, including implementation activities, the status of moose and wolf populations, and recommendations for changes, if necessary, to achieve the objectives of the plan;

(6) other specifications the board considers necessary are as follows:

(A) the commissioner will suspend wolf control activities:

(i) when wolf inventories or accumulated information from permittees indicate the need to avoid reducing wolf numbers below the management objective of 30 wolves specified in this subsection;

(ii) when spring conditions deteriorate to make wolf control operations infeasible; or

(iii) no later than April 30 in any regulatory year;

(B) wolf, **black bear and brown bear** control activities will be terminated

(i) when prey population management objectives are attained; or

(ii) upon expiration of the period during which the commissioner is authorized to reduce predator numbers in the predator control plan area;

(C) [D] the commissioner will annually close wolf hunting and trapping seasons as appropriate to ensure that the minimum wolf population objective is met.

...

PROPOSAL 133

EFFECT OF THE PROPOSAL: Start all big game prey species hunting seasons one week earlier for residents in intensive management (IM) areas in Region III.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: We assume this proposal refers to caribou and moose because these are the 2 big game species identified by the Board for IM in Region III.

This is an allocation issue that should be determined by the Board on a case-by-case basis. Allocation should be based upon a variety of factors specific to each IM area that include: species identified as important for providing high levels of human harvest; species benefitting from predation control; harvestable surplus; customary and traditional (C&T) use findings; and historical harvest by residents and nonresidents. If this proposal were adopted, these factors would no longer be considered, resulting in restriction of nonresident hunting opportunity even when such restrictions are not necessary.

Intensive management areas have been adopted for caribou, and moose, as listed in 5 AAC 92.108. In addition, AS16.05.255(d) states that “regulations adopted... must provide that, consistent with the provisions of AS 16.05.258, the taking of moose, deer, elk, and caribou by residents for personal or family consumption has preference over taking by nonresidents.”

Of the 5 caribou herds identified in Region III as important for IM, 1 herd has no nonresident season and 3 have more restrictive nonresident than resident bag limits and season lengths. Only 1 herd, which is harvested under a drawing permit hunt, is not more restrictive for nonresidents than for residents. However, during regulatory years 2007–2008 through 2011–2012, 91% of permit holders were resident hunters, who killed 90% of caribou harvested.

Where moose have been identified as important for IM, the Board has allocated harvest by means of 48 different hunts (like areas were combined, such as multiple drawing hunts in and around the Koyukuk Controlled Use Area), comprising 16 drawing hunt areas, 9 registration hunts, 21 general season hunts and 2 Tier II hunts. Of these, 21 hunts have more restrictions on nonresidents than residents for season dates, bag limits, and/or the number of permits available. An additional 21 hunts (6 drawing, 8 registration, 5 general season, and 2 Tier II) have no nonresident seasons. Only 3 general season and 3 small drawing hunts do not restrict nonresidents more than residents. In predation control areas, the board has restricted or eliminated nonresident seasons for the moose or caribou populations that the control programs were intended to benefit.

PROPOSAL 134

EFFECT OF THE PROPOSAL: Allocate all Region III drawing hunts for big game between residents and nonresidents such that a minimum of 90% of the permits go to residents.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. Board policy (2007-173-BOG) indicates that allocations for specific hunts will be decided individually, based upon historical patterns of nonresident and resident permit use over the past 10 years. This proposal would pertain to brown bear, bison, caribou, moose, and sheep. There are no drawing permit hunts for black bears, wolves, or wolverine in the region.

For brown bears, only Unit 26B has a drawing hunt, in which 6 permits are issued to nonresident hunters. Residents hunt grizzly bears under a general season in this area, as in the remainder of Region III. The Delta caribou herd is the only caribou herd in the region that is hunted by drawing permit. Ninety-one percent of Delta caribou permits are awarded to residents. There is no limit on the allocation to nonresidents.

Bison hunting in Region III is available by drawing permit only. During the past 5 years an average of 138 permits were available annually. Nonresidents received less than 2% of permits. There is no limit on the allocation for nonresidents.

There are 3 drawing permit hunts for sheep in Region III: Tok Management Area, Mount Harper, and Delta Controlled Use Area. Residents and nonresidents have general season access in the remainder of the region. In the Tok Management Area, the board allows no more than 10% of permits to be allocated to nonresidents. There is no limit on the allocation to nonresidents of permits for Mount Harper and Delta Controlled Use Area sheep hunts. About 9% of these permits were issued to nonresidents during 2004–2010.

Of 3,861 moose drawing permits available in Region III, 96 are allocated exclusively to nonresident hunters, 3,016 exclusively to resident hunters, and 749 to either residents or nonresidents (unallocated). Thereby, nonresidents may apply for 22% of the available moose drawing permits. However, most of the permits available to nonresidents are in hunt areas where resident hunters can hunt by general season, registration permit, or both have longer seasons and/or have less restrictive bag limits. Examples include 1) portions of Unit 20B, where 1,116 antlerless moose drawing permits are issued to residents only and no nonresident season exists; 2) the Koyukuk Controlled Use Area, where residents have access to unlimited registration permits and 108 drawing permits for bulls, and nonresidents are restricted to 28 drawing permits for bulls with 50-inch antlers or 4 or more brow tines on at least one side; and 3) Unit 21E where residents can harvest any bull under general season and nonresidents are restricted to 50 drawing permits for bulls with 50-inch antlers or 4 or more brow tines on at least one side.

PROPOSAL 135

EFFECT OF THE PROPOSAL: Allocate all drawing hunts statewide between residents and nonresidents such that a minimum of 90% of the permits go to residents.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 134.

PROPOSAL 136

EFFECT OF THE PROPOSAL: Adopt earlier seasons for residents to hunt Dall sheep in Region III; residents, August 3–September 20 and nonresidents, August 10–September 20.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between resident and nonresident. Providing a longer resident season is used to separate resident and nonresident hunters in some Region III hunts, including general moose seasons in 11 hunt areas, as well as to provide for customary and traditional (C&T) uses pursuant to the state subsistence priority law. There are positive C&T findings for sheep in all or portions of Units 19, 23, 24, 25, and 26. This proposal might alleviate some conflicts between users. This proposal would also provide for more opportunity for Alaska

residents than nonresidents in cases where there is a positive C&T use finding and residents and nonresidents presently have the same seasons and bag limits.

The proponent states that the availability of legal rams has been significantly reduced and is in serious decline. Harvest statistics and sheep survey data indicate that some populations are stable to increasing while others may be stable to declining. Harvest data suggest that 60–80% of legal rams are harvested each year throughout Region III.

Adopting this proposal is not likely to adversely affect sheep populations in the short-term, even if general season harvest increases due to the earlier resident season opening. However, in areas that are heavily harvested, providing resident hunters an opportunity to hunt before nonresidents may reduce the number of legal rams available to nonresidents, reduce the ability of nonresidents to select a big ram to harvest, or increase the effort required by nonresidents to harvest a ram, but the extent that this might occur is unknown. In some cases, such as Unit 19 where the Board made a positive C&T use determination for sheep (March 2010), and where resident and nonresidents seasons and bag limits are identical, amendment of this proposal may serve to provide a priority for subsistence uses of sheep by Alaska residents.

The full-curl restriction should prevent over-harvest from affecting sheep populations in most areas, but there still may be a perceived scarcity of legal rams in areas that are heavily hunted. Lower harvests and success rates since the early 1990s compared to when these parameters peaked in the late 1980s suggest that competition among hunters for legal rams has increased. Region-wide, sheep harvest peaked during the late 1980s, declined through late 1990s, and has increased since 2000. This pattern is most evident in the eastern Brooks Range and Unit 20A, which account for much of the total harvest for Region III. Harvest in some areas has either remained stable since the initial population decline (Unit 19C) or continued to decline (Unit 12).

Region III sheep hunters are predominantly residents and residents take a majority of the rams harvested. During 1981–2010, 75% of all (general season and drawing permit) sheep hunters were residents who took 59% of the harvest. The number of nonresident hunters increased slowly throughout 1981–1996. However, the number of resident hunters increased dramatically during the 1980s and declined sharply during the early 1990s. The proportional take by residents declined and stabilized at 54% of the overall harvest (drawing and general season) during 1997–2010 (range = 52–56%), accompanied by a slight decline in the proportion of resident sheep hunters.

These patterns are similar when looking at general season data only. While nonresident hunter numbers changed slightly in response to availability of legal rams, resident hunter numbers appeared to respond more dramatically. The number of resident general season hunters increased 66% from 724 residents in 1981 to 1,202 in 1991, declined 46% to 650 residents by 1997, and rose 43% to 929 residents by 2010. At the same time, the number of nonresident general season hunters increased 56% from 212 nonresidents in 1981 to 394 in 1991, declined 19% to 319 by 1997 and increased 4% to 333 nonresidents by 2010.

Fewer residents hunted sheep when harvests declined in the early 1990s, whereas nonresidents changed their behavior very little. During 1981–2010, 73% of general season sheep hunters were

residents who took 55% of the harvest. Residents took 60% of all rams harvested during 1981–1996 and 49% during 1997–2010. However, resident harvest may currently be trending higher due to increasing numbers of resident hunters and relatively static nonresident hunter numbers, as residents took 53% of the general season harvest during 2008–2010.

In drawing hunts, competition among hunters is controlled by the number of permits available. During 2004–2010, resident hunters obtained 91% of 1,757 drawing permits issued in Region III and took 87% of the harvest. Seventy-seven percent of resident permittees hunted, killing 526 rams (43% success). Eighty-nine percent of nonresident permittees hunted, killing 82 rams (57% success). In the Tok Management Area, nonresidents are limited to 10% of available permits. In the Delta Controlled Use Area and Mount Harper hunts, about 9% of applicants are nonresidents who receive an average of about 9% of permits available.

PROPOSAL 137

EFFECT OF THE PROPOSAL: Convert all nonresident general season Dall sheep hunts in Region III to drawing permit, require guide–client agreements and limit harvest to 15–20% of allowable harvest.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the board. Board policy (2007-173-BOG) indicates that allocations will be made on a case by case basis, based upon the historical data of nonresident and resident permit allocation over the past 10 years.

The Department has no biological concerns. This proposal is not likely to affect sheep populations, since the current full curl ram bag limit adequately guards against overharvest, at least in most cases. In heavily harvested areas, limiting nonresidents may increase the number of legal rams available to residents, but the extent to which this might occur is unknown. In areas hunted primarily by residents, this proposal may not provide any benefit to resident sheep hunters.

If the board decides to adopt this proposal, we request that nonresident harvest be limited to a specific number of permits in each unit, or 15–20% of the estimated total harvest in each unit, rather than 15–20% of the allowable harvest. Sheep surveys cannot be conducted in each unit at the intensity and regularity needed to estimate the number of full curl rams available each year. The current full curl ram bag limit should continue to prevent excessive harvest.

Lower success rates compared with the 1980s and higher hunter numbers compared with the late 1990s suggest that competition among hunters for legal rams has increased. Region-wide, sheep harvest peaked during the late 1980s, declined through the late 1990s, and has been increasing since 2000. This pattern is most evident in the eastern Brooks Range and Unit 20A, which account for much of the total harvest for Region III. Harvest in some areas has either remained stable since the initial population decline (Unit 19C) or continued to decline (Unit 12).

During 2001–2010, 70% of general season sheep hunters were residents who took 50% of the harvest (average = 29% success). Nonresident success throughout the region is generally greater than 60%.

General season hunter statistics during fall 2001–2010 sheep hunts in selected units:

	Average annual hunter numbers	Percent resident hunters	Average annual harvest	Percent harvested by residents	Resident success rate	Non- resident success rate
All of Region III	1,153	70%	470	50%	29%	69%
Unit 12	295	75%	122	54%	30%	75%
Unit 19C	124	50%	62	32%	32%	68%
Unit 20A	198	66%	78	37%	22%	73%
Unit 25A	114	55%	63	45%	46%	68%

PROPOSAL 138

EFFECT OF THE PROPOSAL: Convert all resident and nonresident general season Dall sheep hunts in Region III to drawing permit and limit nonresidents to 10% of permits.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the board, and therefore, the Department has no recommendation. Board policy (2007-173-BOG) indicates that allocations will be made on a case by case basis, based upon the historical data of nonresident and resident permit allocation over the past 10 years. In addition, drawing permits for resident hunters would not provide reasonable opportunity for subsistence uses outside of nonsubsistence areas. There are positive customary and traditional (C&T) use findings for sheep in all or portions of Units 19, 23, 24, 25, and 26.

The Department has no biological concerns. This proposal is not likely to affect sheep populations, since the current bag limit of full curl rams adequately guards against overharvest. In heavily harvested areas, limiting the total number of permits available and limiting nonresidents to 10% of permits may increase the number of legal rams available to residents and/or increase the average age and horn size of harvested rams, but the extent to which this might occur is unknown. In areas hunted primarily by residents and areas with low hunting pressure, this proposal may not provide significant improvement in the resident hunting experience.

During fall 2001–2010 in Region III, residents made up 70% of general season sheep hunters, and harvested 50% of rams taken. Hunting pressure and resident: nonresident ratios varied by area. Resident hunter success was generally greater than 25% but less than 50%, while nonresident hunter success was about 65–75%.

Average age of rams harvested during the general season hunt in Region III varied slightly since full-curl regulations were put in place in the fall of 1994. During fall 2001–2010, average ram age was 9.0 years. During this 10-year period, residents’ rams averaged 8.9 years old, while nonresidents’ rams averaged 9.0 years old. Average ram age peaked at 9.5 years-of-age in 1997 when hunter numbers were low. As hunter numbers increased, average age declined to 8.7 in 2005 (when horn sealing began to be required), rose to 9.2 by 2007, and declined again to 8.7 by 2010 as hunter numbers continued to rise. Average ram age also varied among game management units.

PROPOSAL 139

EFFECT OF THE PROPOSAL: Convert all nonresident general season Dall sheep hunts in Region III to drawing permit and limit to 5%.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analyses and recommendations for proposals 134, 136, 137, and 138.

PROPOSAL 140

EFFECT OF THE PROPOSAL: Reauthorize Region III resident hunter grizzly tag fee exemptions.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal, see issue statement

PROPOSAL 141

EFFECT OF THE PROPOSAL: Implement black bear trapping regulations.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This proposal was amended by the Board and deferred to the March 2012 meeting from the March 2010 meeting. The Department considers this a methods and means allocation among users and as such has no recommendation to the Board. In the units included in this proposal for potentially allowing black bear trapping, the Department does not have any conservation concerns for the populations of black bears. To establish seasons and bag for trapping black bears, the Department has reviewed other regulations that may need to be modified and suggested regulatory changes are included below.

If adopted, the Department recommends establishing black bear trapping seasons for residents only. Including nonresidents under trapping seasons adds a degree of complexity and potential

complications due to statutory requirements for guides and tags. Currently, nonresidents must purchase a big game tag for each animal they intend to take. If a nonresident purchases a trapping license, the black bear would not be a big game animal, and tags would not be required. In addition, no guiding requirements would apply. These considerations become even more complicated because of incidental take of brown bears during black bear trapping.

The Department also recommends limiting black bear trapping seasons to Units 19A, 19D, 20C, 20E and a portion of Unit 12. We recommend deleting the proposed trapping season in Unit 25D because communications with the local fish and game advisory committee indicate lack of support. Additionally because black bear trapping is already authorized in Unit 16B under the Unit 16 predator control program, the department recommends deferring the Unit 16B portion of this regulation to the next Region IV Board of Game meeting in 2013. This deferral will allow the board to simultaneously consider black bear trapping in Unit 16B along with a proposal to update the Unit 16 predator control program regulations and does not prevent the public from snaring in black bears in the Unit in the interim.

See proposal issue statement for more information.

Seasons and Bag Limits

5 AAC 84.270. Furbearer trapping. Trapping seasons and bag limits for furbearers are as follows:

Units and Bag Limits	Open Season	Bag limit
<u>(XX) Black Bear</u>		
<u>RESIDENTS ONLY</u>		
<u>Unit 12, that portion north of the Alaska Highway, and that portion south of the Alaska Highway within the Tanana River drainage upstream from but not including the Tok River drainage</u>	<u>Apr. 15–June 30</u> <u>July 1–Oct. 15</u>	<u>No bag limit, by registration permit only; may be closed by emergency order when XX brown bears incidentally taken.</u>
<u>RESIDENTS ONLY</u>		

Unit 16(B)

Apr. 15–June 30
July 1–Oct. 15

No bag limit, by registration permit only; may be closed by emergency order when XX brown bears incidentally taken.

RESIDENTS ONLY

Unit 19(A)

Apr. 15–June 30
July 1–Oct. 15

No bag limit, by registration only; may be closed by emergency order when XX brown bears incidentally taken.

RESIDENTS ONLY

Unit 19(D)

Apr. 15–June 30
July 1–Oct. 15

No bag limit, by registration only; may be closed by emergency order when XX brown bears incidentally taken.

RESIDENTS ONLY

Unit 20(C)

Apr. 15–June 30
July 1–Oct. 15

No bag limit, by registration permit only; may be closed by emergency order when XX brown bears incidentally taken.

RESIDENTS ONLY

Unit 20(E)

Apr. 15–June 30
July 1–Oct. 15

No bag limit, by registration only; may be closed by emergency order when XX brown

bears incidentally
taken.

Statewide Regulations

5 AAC 92.0XX Black bear trapping requirements. Establish a new regulation for black bear trapping requirements.

(a) A person may not trap a black bear with the methods in 5 AAC 92.095, without first obtaining a trapping license and registering with the department.

(b) In addition to any condition that the department may require under 5 AAC 92.051 black bear trapping is subject to the following provisions:

(1) a person must be at least 16 years of age to trap black bears;

(2) a person using bait or scent lures shall clearly identify each site with a sign reading "black bear bait and bucket footsnare station" that also displays the person's trapping license number, or mark each bucket footsnare with the trapping license number;

(3) only biodegradable materials may be used as bait; if fish or game is used as bait, only the head, bones, viscera, or skin of legally harvested fish and game may be used;

(4) a person who uses bait or scent lures must remove bait, litter, and equipment from the site when baiting is completed;

(5) except in Units 12, 13, 15, 16, 19, 20, 21, a person may not give or receive remuneration for the use of a black bear bait and bucket footsnare station, including barter or exchange of goods; however, this paragraph does not apply to a licensed guide-outfitter who personally accompanies a client at the black bear bait and bucket footsnare station site;

(6) a person must report to the nearest department office, within five days, the incidental take of any brown bears taken by bucket footsnare or take of any brown/grizzly bear accompanying a brown bear taken by bucket footsnare;

(7) a person who sets bucket footsnare must check their bucket footsnare a minimum of every two days;

A regulation allowing discretionary conditions to be applied to trapping permits has been in place for years. The division is recommending additional conditions to allow collection of

biological samples without requiring sealing in some areas, and require minimum distance requirements in some areas.

5 AAC 92.051. Discretionary trapping permit conditions and procedures.

In areas designated by the board, the department may apply any or all of the following conditions to a registration trapping permit:

- (1) a permittee shall demonstrate
 - (A) the ability to identify the permit area;
 - (B) a knowledge of trap use and safety;
- (2) a permittee shall attend an orientation course;
- (3) only a specified number of permittees may trap during the same time period;
- (4) a permittee may trap only in a specified subdivision within the permitted area;
- (5) a permittee may only use traps or snares of a specified type or size;
- (6) a permittee may only set a trap or snare and bait as specified by the department;
- (7) before receiving a permit, the permittee shall acknowledge in writing that he or she has read, understands, and will abide by, the conditions specified for the permit area;
- (8) a permittee may trap only during the specified time periods;
- (9) a permittee must check his or her traps within a specified interval;
- (10) a permit applicant must be at least **16** [10] years old;
- (11) a permit applicant less than **16** [14] years old must be accompanied by an adult, **16 years of age or older**, with a valid trapping license;
- (12) a permittee shall submit, on a form supplied by the department, information requested by the department about the permittee's trapping activities under the permit; the permittee shall submit this form to the department within the time limit set by the department;
- (13) a permittee shall label the permittee's traps and snares as specified by the department.

(14) a permittee who takes an animal under a permit shall deliver specified biological specimens to a check station or to the nearest department office within a time set by the department;

(15) a permittee may not possess or transport an animal unless sufficient portions of the external sex organs remain attached to either the hide or meat to indicate conclusively the sex of the animal, this does not apply to the meat of an animal that has been cut and placed in storage or otherwise prepared for consumption upon arrival at the location where it is to be consumed.

(16) a person may not use bait, scent lures, or set a bucket foot snare within

(A) one-quarter mile of a publicly maintained road, trail, or the Alaska Railroad;

(B) one mile of a house or other permanent dwelling, businesses or schools; or

(C) one mile of a developed campground or developed recreational facility;

Trappers will likely need to use artificial light because they do arrive at sets after dark, particularly in September. This could become a safety issue. Use of lights could be restricted to within a certain distance of the set.

5 AAC 92.080. Unlawful methods of taking game; exceptions. The following methods of taking game are prohibited:

(7) with the aid of a pit, fire, artificial light, laser sight, electronically enhanced night vision scope, radio communication, cellular or satellite telephone, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical (excluding scent lures), or a conventional steel trap with an inside jaw spread over nine inches, except that

(A) a rangefinder may be used;

(B) a killer style trap with a jaw spread of less than 13 inches may be used;

(C) artificial light may be used

(i) for the purpose of taking furbearers under a trapping license during an open season from November 1 – March 31 in Units 7 and 9 – 26; **or black bears under a trapping license during an open trapping season;**

The Department recommends the following modifications to trapping methods to

- 1) allow same-day-airborne take of black bears during a trapping season, in order to provide flexibility to dispatch other bears in the group that may not be in the snare, and
- 2) prohibit trapping black bears by any means other than centerfire rifles and foot snares of a specific design.

5 AAC 92.095. Unlawful methods of taking furbearers; exceptions.

(a) The following methods and means of taking furbearers under a trapping license are prohibited, in addition to the prohibitions in 5 AAC 92.080:

...

(8) a person who has been airborne may not use a firearm to take or assist in taking a wolf or wolverine until after 3:00 am on the day following the day in which the flying occurred; or in taking a coyote, arctic fox, red fox, [OR] lynx, **or black bear**, unless that person is over 300 feet from the airplane at the time of taking; this paragraph does not apply to a trapper using a firearm to dispatch an animal caught in a trap or snare;

...

(20) taking black bears by any means other than centerfire firearm or a bucket foot snare

When the Board originally allowed the sale of bear hides and skulls, the regulations adopted required that all bears intended for sale had to be sealed. This would require sealing of bears taken as a furbearer. This requirement is included for review purposes.

5 AAC 92.165. Sealing of bear skins and skulls. (a) Sealing is required for brown bear taken in any unit in the state and black bear of any color variation taken in Units 1 - 7, 14(A), 14(C), 15 - 17 and 20(B), and a bear skin or skull before the skin or hide is sold

Currently, meat of a big game animal, including black bear, cannot be sold. This prohibition would not apply to black bear as a furbearer taken under trapping seasons. For consistency, we recommend that no sale of black bear meat be allowed under either hunting or trapping.

5 AAC 92.200 Purchase and sale of game.

(a) In accordance with AS 16.05.920 (a) and 16.05.930(e), the purchase, or sale of game or any part of game is permitted except as provided in this section.

(b) Except as provided in 5 AAC 92.031, a person may not purchase, sell, advertise, or otherwise offer for sale or barter:

...
(8) the meat of big game, **black bear**, and small game,

Require the salvage of either the hide or the meat of a black bear taken by trapping.

5 AAC 92.220. Salvage of game meat, furs, and hides. (a) Subject to additional requirements in 5 AAC 84 - 5 AAC 85, a person taking game shall salvage the following parts for human use:

(3) **except as provided in (6) of this section,** from January 1 through May 31, the hide, skull, and edible meat as defined in 5 AAC 92.990, and from June 1 through December 31, the hide and skull of a black bear taken in a game management unit in which sealing is required; from June 1 - December 31, the skull and either the hide or edible meat of a black bear taken in Unit 20(B),

(4) **except as provided in (6) of this section,** from January 1 through May 31, the edible meat, and from June 1 through December 31, either the hide, or the edible meat as defined in 5 AAC 92.990, of a black bear taken in any game management unit in which sealing is not required; however, from June 1 through December 31, the edible meat of a black bear taken by a resident hunter taking black bear under customary and traditional use activities at a den site from October 15 through April 30 in Unit 19(A), that portion of the Kuskokwim River drainage within Unit 19(D) upstream from the Selatna River drainage and the Black River drainage, and in Units 21(B), 21(C), 21(D), 24, and 25(D) must be salvaged.

...

(6) either the hide, or the edible meat as defined in 5 AAC 92.990, of a black bear taken under a trapping license;

Since trapping methods cannot totally exclude non-target animals, the prohibition on taking sows with cubs, and cubs must be modified to allow trapping of any bear.

5 AAC 92.260. Taking cub bears and female bears with cubs prohibited. A person may not take a cub bear or a female bear accompanied by a cub bear, except that a black bear cub or a female black bear accompanied by a cub bear may be taken by **a black bear trapper during an open trapping season, or** by a resident hunter from October 15 through April 30 under customary and traditional use activities at a den site in Unit 19(A), that portion of the Kuskokwim River drainage within Unit 19(D) upstream from the Selatna River drainage and the Black River drainage, and in Units 21(B), 21(C), 21(D), 24, and 25(D).

Because trapping methods are restricted to the use of bucket footsnare, a definition of a legal bucket footsnare must be adopted.

92.990 Definitions:

() “bucket footsnare” means a cable at least 3/16-inch in diameter with a 7x7 strand, equipped with a locking device and at least one swivel, set in a manner designed to catch a bear by the foot; footsnare may only be set when accompanied by a spring powered device that propels the footsnare closed and may only be used inside a bucket or container into which the bear must reach, triggering the spring device and becoming snared by the foot;

all footsnare, spring devices, buckets and/or containers must be elevated at least 48 inches off the ground; footsnare must be anchored to a live tree 6 inches in diameter or larger.

The Board will need to establish a customary and traditional use finding and establish an amount necessary for subsistence for black bear as a furbearer before establishing seasons in units where these determinations have not already been made. Current findings for black bear as a big game animal in the proposed areas are shown for reference.

5 AAC 99.025. Customary and traditional uses of game populations.

The Board of Game has examined whether the game populations in the units set out in the following table, excluding those units or portions of those units within nonsubsistence areas established by the Joint Board of Fisheries and Game (5 AAC 99.015), are customarily and traditionally taken or used for subsistence and make the following findings:

SPECIES & UNIT	FINDING	AMOUNT REASONABLY NECESSARY FOR SUBSISTENCE USES
(2) Black Bear		
...		
Unit 12	positive	40 - 60
...		
Unit 16(B)	positive	15 - 40
...		
Unit 19	positive	30 - 50
Unit 20, outside the Fairbanks non-subsistence area	positive	20 - 30
...		

(13) **Furbearers and Fur animals.** The Board of Game (board) finds that all resident uses of furbearers and fur animals are customary and traditional uses, and that furbearers and fur animals, in general, tend to be the focus of these uses, rather than users focusing on individual species or populations. Given this finding, the board also finds that effort on any given population varies according to its harvestable surplus.

(A) Beaver positive harvestable portion
all units with a
harvestable portion

...

() Black Bear
all units with a
harvestable portion

...

(b) In order to establish an amount reasonably necessary for subsistence uses under this section and whether a reasonable opportunity for subsistence uses exists, the Board of Game will, as the board determines is appropriate, attempt to integrate opportunities offered under both state and federal regulations.

(c) In this section,

(1) “amount reasonably necessary for subsistence uses” includes the total amount of animals from a population that must be available for subsistence hunting in order to provide a reasonable opportunity for subsistence uses, under state and federal subsistence hunting regulations, where both exist;

(2) “reasonable opportunity” has the meaning given in AS 16.05.258(f).

PROPOSAL 142

EFFECT OF THE PROPOSAL: Prohibit trapping of black bear in the Interior region.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 141.

PROPOSAL 143

EFFECT OF THE PROPOSAL: Allow the taking of black bear at bait stations the same day you have been airborne in Unit 20.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 144.

PROPOSAL 144

EFFECT OF THE PROPOSAL: Allow for same-day-airborne hunting of black bear over bait in Region III.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Allowing same-day-airborne harvest at established bait stations is not likely to increase harvest above sustainable levels. Based on extrapolations from historical black bear research projects, the Department estimated the Region III black bear population in 2006 at 30,000–50,000 bears. Fewer than 400 black bears were sealed in the region in 2006. Although sealing was not required in some areas, harvest was very low in units where sealing was required. A harvest of 400 represents a harvest rate of 0.8–1.3%, well below maximum sustained yield, indicating that additional harvest opportunity is available.

It is currently legal to take black bears over bait on the same day a hunter is airborne in Units 7, 9–11, 13, 14A, 14B, 15–17, and in any predator control area, provided that the hunter is at least 300 feet from the airplane (5 AAC92.044).

PROPOSAL 145

EFFECT OF THE PROPOSAL: Develop a Unit specific amount reasonably necessary for subsistence (ANS) finding for wolves in the Interior Region.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The Board reviewed the ANS amounts for furbearers and fur animals on a statewide basis at the January 2012 meeting in Anchorage and determined that an ANS of 90% of the allowable harvest for both furbearers and fur animals statewide was appropriate.

PROPOSAL 146

EFFECT OF THE PROPOSAL: Open year-round coyote hunting and trapping seasons in Region III.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: This proposal is not likely to significantly increase harvest or affect region-wide coyote or prey densities. The Department recommends not adopting this proposal for coyote trapping because coyote hides are very poor quality during the summer, with no value in the fur

industry and little or no value for personal garment use, and because summer trapping for predators, such as coyotes, could create incidental take issues with other predators, scavengers, and pets.

The department recognizes that this issue as it applies to hunting regulations has not undergone vigorous public debate, and that other issues may be raised during the Board process.

The current coyote hunting season in Region III is August 10–May 25 for Interior units and August 10–April 30 for North Slope units. The current coyote trapping seasons vary by unit with the opening date being October 15 or November 1 and closing dates vary from March 31 to April 30. The hide of a coyote must be salvaged after take under either hunting or trapping licenses.

There is no sealing requirement for coyotes, but based on extrapolation from Trapper Questionnaires, coyote harvest in Region III is around 200–400 per year. Estimated coyote density during a research project in the foothills of the Alaska Range (southern Unit 20A) was around 0.1 coyotes per square mile in a study area of approximately 350 square miles. Coyote densities in the region vary widely, but if that density was extrapolated to one quarter of Region III, we would have around 6,000 coyotes. Thus, it is likely that a very small portion of the coyote population is currently being harvested through trapping and hunting. Year-round hunting and trapping seasons are not likely to significantly increase harvest or affect coyote or prey densities. Year-round hunting and/or trapping seasons currently occur for squirrel, marmot, and hare.

PROPOSAL 147

EFFECT OF THE PROPOSAL: Allow the use of helicopters for access to trapping in Region III.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the Board. Both trapping and shooting of furbearers is legal under a trapping license. Use of helicopters would expand the areas that trappers could access to set snares or traps, thereby providing for more use of the furbearer resources and might reduce conflicts between trappers in the more commonly accessed areas, such as along road and trail systems. However, conflicts could increase if helicopters are used in heavily trapped areas. Current regulations prohibit using a helicopter to transport furbearers (5 AAC 92.080). Regulation 5 AAC92.095 makes some exceptions to prohibitions in 5 AAC 92.080, but restricts shooting of furbearers under a trapping license if they are caught in a trap or snare while using a helicopter (aircraft) for transportation. These restrictions include 1) a person may not shoot free-ranging wolves and wolverines under a trapping license on the same day the trapper is airborne, 2) a trapper must be 300 feet or more from an aircraft to shoot fox, coyote, and lynx on the same day the trapper is airborne, 3) motorized vehicles may not be used to herd or molest furbearers, and 4) trappers must be out of any motorized vehicle before shooting at furbearers (with some exceptions for non-aircraft).

If the board chooses to adopt this proposal, it should be recognized that wolves and wolverines are both big game and furbearers and the regulation would only apply to these species as furbearers.

PROPOSAL 148

EFFECT OF THE PROPOSAL: Close certain nonresident trapping seasons in the Interior Region.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue, and therefore the department has no recommendation. Action on this proposal depends upon on harvestable surplus relative to amounts necessary for subsistence (ANS) pursuant to AS 16.05.258. The Board may choose to revisit ANS determinations for Region III furbearers and fur animals. If harvestable surplus exceeds ANS, then the Board may also choose to retain nonresident trapping seasons. At the statewide meeting, the Board determined that the ANS for all furbearers and fur animals is 90% of the allowable harvest.

PROPOSAL 149

EFFECT OF THE PROPOSAL: Extend the season for fox, marten, mink, and weasel in Units 12, 20, and 25C to March 15.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: This proposal uses incidental take during the extended lynx season as justification for extending the season for fox, marten, mink, and weasel. Trappers who incidentally catch other furbearers in lynx sets must forfeit those animals to the state. A survey of area biologists in Units 12, 20, and 25C showed that, of all the species listed in this proposal, trappers turned in an average of fewer than 2 incidentally-harvested animals per year taken during the late lynx season. Compared to the overall harvest of thousands of furbearers in this area, the forfeit of so few incidentally caught furbearers does not justify an open trapping season for fox, marten, mink, and weasel after February.

A 4-month season exists for fox, marten, mink, and weasel in this area, which represents a significant opportunity for harvest. The fox season in Units 12 and 20E is already open until March 15. These long seasons are based on timing of fur quality, alignment with other seasons, and conservation. Harvestable surplus is lowest at the end of the season. Marten are susceptible to overharvest, especially near urban centers. Units 20A, 20B, 20C, 20D, and 25C get the most trapping pressure of any units in Region III due to their proximity to the largest human population centers in the region (Fairbanks, North Pole, Eielson, Fort Wainwright, Delta Junction, and Nenana). Late season fox in these units are often of no value due to rubbing and other fur damage.

The lynx season in Units 12, 20, and 25C was recently changed to end in March (in 2006 for Units 12 and 20E, and in 2010 for all of Units 12, 20, and 25C). Previously, the lynx season ended in February, along with fox, martin, mink, and weasel seasons. An alternative would be to return the lynx season ending date to the end of February in Units 12, 20, and 25C.

Beaver, coyote, lynx, muskrat, otter, squirrel, marmot, wolf, and wolverine seasons in Units 12, 20, and 25C are open through March 15 or later. Beaver, otter, muskrat, wolf, coyote, and some wolverine and lynx have fur quality that lasts beyond February. Ground squirrels and marmots hibernate in winter, so harvest opportunity is provided through open seasons during summer.

PROPOSAL 150

EFFECT OF THE PROPOSAL: Close certain nonresident furbearer hunting seasons in the Interior Region.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue, and therefore the Department has no recommendation. Action on this proposal depends upon on harvestable surplus relative to amounts necessary for subsistence (ANS) pursuant to AS 16.05.258. The Board acted on the ANS for fur animals and furbearers at the statewide meeting in January and determined that the ANS is 90% of the allowable harvest. The Board may choose to revisit ANS determinations for Region III furbearers and/or fur animals. Since the harvestable surplus exceeds ANS, then the Board may choose to retain nonresident hunting seasons.

PROPOSAL 151 - 5 AAC. 92.540. Controlled use areas.

EFFECT OF THE PROPOSAL: Repeal controlled use areas that no longer meet the management intent.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the Board, and therefore, the department has no recommendation. This proposal reviews conditions of controlled use areas (CUAs) in Region III and would repeal those that no longer meet the original intent. The table below lists controlled use areas in Region 3, their current status, and likely consequences of repeal. Repeal of some CUAs may affect reasonable opportunity for subsistence. Area overviews presented during the Board meeting will provide more detailed information about each CUA.

Units & Controlled Use Areas	Restriction	Original Intent	Most Recent BOG review	Meets Objectives	Consequences of Repealing the CUA
Unit 19D, Upper Kuskokwim	No aircraft for moose hunting, except between publicly owned airports	reduce competition for moose by hunters using aircraft along major river corridors	2008	Yes	Competition between hunters using boats & and hunters using aircraft
Units 19A, 19B: Holitna-Hoholitna	No boats in excess of 40 hp for big game hunting Aug. 1–Nov. 1	Reduce hunting pressure along these rivers	2008	Yes	Increased competition & crowding, complicate reopening the moose season
Unit 20A: Wood River	No motorized vehicles for big game hunting Aug. 1–Sep. 30, except aircraft	Address conflicts between ATV and airplane/horse hunters	2010	Yes	User conflicts & fish habitat degradation will increase; hunt quality will decline.
Unit 20A: Yanert	No motorized vehicles except aircraft for big game	Address conflicts between ATV users and airplane and horse users	2011	Yes	User conflicts & fish habitat degradation will increase; hunt quality will decline for airplane and horse users.
Units 13, 20A, 20D: Delta	No motorized vehicles or pack animals for big game hunting Aug. 5–Aug. 25, except Richardson Hwy & Charlie Boyd airstrip.	Provide uncrowded hunt conditions with reasonable likelihood of selecting a trophy ram, reduce conflicts between walk-in, hunters and hunters using other transport.	Mar 2004	Yes	Loss of walk-in only sheep hunt. Conflicts between walk-in and hunters using other transport for sheep, moose, & caribou.

Units & Controlled Use Areas	Restriction	Original Intent	Most Recent BOG review	Meets Objectives	Consequences of Repealing the CUA
Unit 20D: Macomb Plateau	No motorized vehicles for big game hunting Aug. 10–Sept. 30, except floatplanes on Fish Lake and vehicles and aircraft on Dry Creek Airstrip	Protect critical caribou habitat on the Macomb Plateau for the Macomb caribou herd and to regulate hunting.	Mar 2004	Yes	Disturbance to core rutting & calving habitat for Macomb caribou herd. Reduce hunt opportunity for this herd.
Unit 20E: Glacier Mountain	No motorized vehicles for big game hunting Aug. 5–Sep. 20, except aircraft and vehicles on the Taylor Hwy.	Conserve Dall sheep population on Glacier Mountain. Now also provides opportunity for walk-in Fortymile caribou hunting.	Mar 2004	Yes	Possible sheep draw permits. Lose walk-in opportunity for Fortymile caribou.
Unit 20E: Ladue River	No motorized vehicles except aircraft for big game hunting Aug. 24–Sep. 20, except on the Taylor Hwy, 9-mile & liberty creek trails, AK–Canada border, and Boundary road.	Conserve the moose population, especially along 9-mile trail. After bull:cow ratios improved, a late-season draw hunt was added for more opportunity.	2010	Yes	Low bull:cow ratios & moose numbers, and/or restrict moose hunting in portions of the LRCUA.
Units 21 & 24: Koyukuk (Also see proposal 162)	No aircraft for hunting moose, except between publicly owned airports; all hunters required to stop at check stations; moose meat of 4 quarters & ribs remain on bone.	Address needs to conserve the moose population in face of inadequate population & harvest data and to address conflicts between local/nonlocal and airplane/boat hunters.	2010	Yes	Conflicts between local/nonlocal and airplane/boat hunters

Units & Controlled Use Areas	Restriction	Original Intent	Most Recent BOG review	Meets Objectives	Consequences of Repealing the CUA
Unit 24: Kanuti (Also see proposal 164)	No aircraft for hunting moose, except between public airports	Address needs to conserve the moose population in face of inadequate population & harvest data and to address conflicts between local/nonlocal and airplane/boat hunters.	2010	Yes	Little to no effect due to federal closed area overlapping most of CUA.
Units 21A, 21D, 21E: Paradise	No aircraft for hunting moose, except between public airports	Address conflicts between local/nonlocal and airplane/boat hunters.	2004	Yes	renewed competition between airplane/boat hunters

PROPOSAL 152

EFFECT OF THE PROPOSAL: Open early-season hunts for youth hunters 10–17 years old for all big game species in Region III and require accompanying adult to forfeit their bag limit.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the Board, and therefore, the department has no recommendation. Currently, hunters at least 10 years old can obtain their own harvest tickets and permits. Hunters 17 and younger may also hunt under the direct and immediate supervision of an adult permit or harvest ticket holder who is responsible for ensuring all legal requirements are met.

General season hunting opportunities before school starts are already in place for Dall sheep and caribou throughout Region 3, and black bear seasons are open year-round. Grizzly bear seasons in much of the region begin August 10 or earlier. Additionally, there are no hunter age restrictions for hunting small game, some of which have year-round opportunities.

Where moose populations are high in much of Unit 20, there are numerous opportunities for youth hunting. Unit 20 has numerous early-season moose drawing permit hunts, a long general season, and registration permit hunts. These hunts provide opportunities before school in August, during long weekends, and in some years, during Thanksgiving and winter holidays. Conversely, in areas such as Units 19 and 24, which have lower moose populations, hunting seasons are

short, and generally begin September 1 or later. Opening early-season youth-only hunts for moose in these areas may require shortening of September seasons, or otherwise restricting other hunters. Consideration of youth-only hunts in these areas, and especially in western Unit 19A and western Unit 25D Tier II hunt areas could require determining whether allowing youth to hunt before other Tier II permit holders would affect subsistence hunting opportunity for other Alaskans. There are positive C&T use findings for several species in several units in Region III.

PROPOSAL 153

EFFECT OF THE PROPOSAL: Make all registration permits available from vendors in the hunt area during the hunt instead of from selected vendors during a time period well before the hunt starts.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: Four game management units are referenced in this proposal. Changes in permit availability for hunts in Units 18 and 23 were considered by the Board during their November 2011 meeting and statewide during the January Board meeting in Anchorage, and were not adopted. The Unit 19D moose hunt, RM650, will be considered by the Board at their March 2012 meeting.

This is an allocation issue in Unit 19D that should be decided by the Board, and therefore, the Department has no recommendation.

The Department has used discretionary authority in 5 AAC 92.052 with direction and approval from the Board to determine the time and place permits are issued for this hunt. The current method of distributing permits in Unit 19D communities during July 14– August 20 has allowed the department to issue approximately 300 permittees resulting in the harvest of up to 128 bulls per year, mostly close to communities along river corridors of the Upper Kuskokwim Controlled Use Area (UKCUA). During the 2009–2011 fall hunts, an average of 109 bull moose was taken by an average of 299 hunters. Although this permit can be used throughout Unit 19D, most permit holders hunt within the 1,118 mi² Upper Kuskokwim Villages Moose Management Area, which includes McGrath. This resulted in a harvest rate of up to 8% of the moose population.

In addition to the RM650 permit, which applies to all of Unit 19D, a harvest ticket may be used to harvest moose in the 94% of Unit 19D that is outside of the UKCUA. This provides opportunity for boat-based hunters along river corridors outside the UKCUA and for airplane hunters who access gravel bars and small lakes outside the UKCUA. During fall harvest ticket hunts in 2009–2011, an average of 329 hunters took an average of 151 antlered bulls in Unit 19D outside the UKCUA.

Issuing permits only in Unit 19D prior to the start of the hunt has resulted in limited participation, facilitating harvest management and recovery of the moose population. If the Board chooses to adopt this proposal, additional participation is likely to occur and may require additional management actions, such as closure by emergency order or Tier II management.

Also, the Board may wish to evaluate impacts on reasonable opportunity and amounts necessary for subsistence as there is a positive customary and traditional (C&T) use finding for moose in Unit 19.

PROPOSAL 154

EFFECT OF THE PROPOSAL: Reauthorize antlerless moose hunting seasons in Unit 19D.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 155

EFFECT OF THE PROPOSAL: Close resident and nonresident caribou seasons in Units 19, 21A, and 21E.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: This proposal would close all resident and nonresident caribou seasons in Units 19, 21A, and 21E; specifically for the small Beaver, Big River–Farewell, and Sunshine herds, but it would also affect the Mulchatna and Tonzona herds that have part of their ranges in the units proposed for closure. There are positive customary and traditional (C&T) use findings for the Beaver Mountains, Big River, and Sunshine Mountains caribou herds.

The 3 small herds proposed for total closure are hunted with conservative bulls-only bag limits and have low annual harvests. During regulatory years 2006–2007 through 2010–2011, harvest was 5–13 caribou from the Big River–Farewell Herd and 0–1 from the Big River and Sunshine herds. Harvestable surplus is 30–60 caribou annually. Therefore, it is unlikely that these small, bulls-only harvests have an appreciable impact on these populations or that a season closure is necessary.

In 2011, during minimum count surveys of the Beaver-Sunshine herds we found 434 caribou. The only information available for the Big River–Farewell herd comes from sightings of caribou recorded during sheep surveys, opportunistic sightings, harvest data, and discussions with the public. In 2004–2005, we estimated the Big River–Farewell herd to include as many as 750–1500 caribou. The number of caribou in this herd is probably now smaller than this estimate and may number about 500–750 caribou.

Unit 19 includes the community of Lime Village. Lime Village residents also provide harvested caribou to residents of Nondalton who are unable to harvest the Mulchatna Herd because of poor abundance. Lime Village is one of the most remote communities in Alaska. In 2007 the per capita harvest of caribou was 159 lb. Caribou was the second largest contributor to the harvest of wild resources in the community. The closure of hunting caribou for Lime Village would be a

major reduction of subsistence opportunity. The Board may wish to evaluate whether the current seasons and bag limits provide reasonable opportunity for continued subsistence uses.

PROPOSAL 156

EFFECT OF THE PROPOSAL: Close the nonresident caribou hunts in Units 19C and 19D.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the Board. This proposal would close nonresident caribou seasons in Units 19C and 19D. It specifically mentions the Tonzona herd, but includes portions of the ranges of the Big River–Farewell, Beaver, Sunshine, and Mulchatna herds. There are positive customary and traditional (C&T) use findings for these herds.

The small Tonzona herd is hunted with a conservative bulls-only bag limit and has annual harvests of 1 or 2 caribou in each of the last 5 years. Harvestable surplus is likely 15–30 annually. Therefore, it is unlikely that this small, bulls-only harvest has an appreciable impact on the population. However, the amount necessary for subsistence (ANS) is 20–30. The Board may wish to consider a nonresident closure because the upper limit of harvestable surplus is equal to the upper limit of amount necessary for subsistence.

In 2011, during minimum count surveys of the Beaver–Sunshine herds we found 434 caribou. The only information available for the Alaska Range herds (Big River–Farewell and Tonzona herds) are from sightings of caribou recorded during sheep surveys, other opportunistic sightings, harvest data, and from discussions with hunters and other members of the public. In 2004–2005, we estimated the Big River–Farewell herd to include as many as 750–1500 caribou; and the Tonzona herd was estimated at 750–1000. The number of caribou in these herds is probably now smaller than these estimates, as stated in the proposal, and may number about 500–750 in each herd.

The Board may wish to evaluate whether the current seasons and bag limits provide reasonable opportunity for continued subsistence uses.

PROPOSAL 157

EFFECT OF THE PROPOSAL: Amend the Mulchatna Caribou Herd Predation Management Plan.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 158

EFFECT OF THE PROPOSAL: Implement a predator control plan for the range of the Mulchatna Caribou Herd.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 157.

PROPOSAL 159

EFFECT OF THE PROPOSAL: Modify the population objective for Mulchatna caribou

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: An intensive Management population objective of 100,000 to 150,000 for the Mulchatna Caribou Herd was established in 2001 when the estimated herd size was 160,000 to 180,000 caribou. Herd size has declined dramatically since then. Surveys since 2001 suggest the large size attained by this herd (estimated at 200,000 caribou in 1996) likely contributed to conditions leading to reduced productivity and survival. In 2009, the Board changed the population objective to 30,000 to 80,000. The lower population objectives allow harvesting at high rates when the herd is experiencing rapid growth regardless of population size relative to objectives. Harvest can still be managed to accommodate herd growth if desired. This harvest may otherwise be lost if managers fail to harvest from a growing population and the population declines before the population objectives are reached. This strategy allows managers to slow the growth, optimize harvests, and evaluate nutrition and range status to prevent the herd from overshooting range capacity. Harvest objectives set at desired levels will still trigger Intensive Management programs when the harvest is not being met even when the population is above the lower objective.

PROPOSAL 160

EFFECT OF THE PROPOSAL: Extend the lynx trapping season in Unit 19 from the current season of 1 November–29 February to 1 November–31 March.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: A longer season is not likely to generate sufficient interest or additional harvest to threaten lynx populations. Average annual lynx harvest in Unit 19 during regulatory years 2006–2007 through 2010–2011 is 77 (range 33–118) lynx per year. Lynx harvest density is low and varies from 0.2 to 3.2 lynx per 1,000 mi². Large areas are inaccessible and untrapped and provide sufficient refuge for lynx. In March, lynx are currently caught incidentally in traps set for other furbearers. These lynx are supposed to be surrendered to the Department, but some are

not. If this proposal were adopted, it would simplify enforcement and these lynx could be retained by the trapper.

PROPOSAL 161

EFFECT OF THE PROPOSAL: Split the moose drawing permit hunt in Unit 21D (DM817) into two drawing permit hunts.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The proponent is concerned that the September 5–25 season for DM817 is too long, causing a problem with meat spoilage because hunters stay in the field too long. Therefore, the proposal is to split the season into September 5–14 and September 16–25.

The Department has no data concerning wanton waste or meat spoilage among the DM817 permit hunters, and the Alaska Wildlife Troopers have not issued any wanton waste citations to DM817 hunters. The hunt area currently requires the salvage of meat-on-the-bone of the 4 quarters and ribs.

Harvest on the DM817 permit is low, with an average of 6.6 moose harvested annually since its inception (see table), therefore the proponents concern of waste could only potentially occur at relatively low levels. Furthermore, of the 36 moose harvested since 2006 on the DM817 permit, 30 (83%) were harvested during September 16–25. Therefore, this proposal appears to concern few moose (average 1.1 moose/year; 17% of 6.6 moose) that could be potentially wasted. Additional administrative costs and workload will be incurred if another permit is required in this area, for what appears to be a relatively low number of moose harvested under the existing permit. The percent of hunters who “did not hunt” may increase if an additional and less flexible hunt regulation is implemented.

DM817 permit hunt, regulatory years 2004–2005 through 2010–2011

Hunt	Regulatory year	Permits issued	Percent did not hunt	Percent unsuccessful hunters	Percent successful hunters	Total bull harvest
DM817	2006–2007	16	25	25	75	9
	2007–2008	31	36	75	25	5
	2008–2009	31	55	50	50	7
	2009–2010	28	57	58	42	5
	2010–2011	31	58	61	39	7
	2010–2011	31	84	40	60	3

PROPOSAL 162

EFFECT OF THE PROPOSAL: Allow 10% of the Koyukuk CUA moose drawing permit winners to use aircraft; allow guided drawing permit winners to choose either boat or aircraft.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue and the Department has no recommendation.

Because access within the Koyukuk Controlled Use Area (KCUA) is restricted to boats, all moose hunters are concentrated on the same navigable waterways during the hunting season. According to a memo from the Division of Game deputy director (May 27, 1981), the KCUA was established specifically to provide protection to local rural hunters' customary and traditional (C&T) uses from undue competition from other hunters using aircraft. There is a positive C&T finding for moose in Units 21 and 24. The board may wish to consider whether this proposal would negatively impact subsistence opportunity within the KCUA.

Some people believe inaccessible areas away from the river corridors function as a refugia and that moose in these areas are not hunted. However, based on studies of radiocollared moose conducted in 1984–1990 in the KCUA, 83% of radiocollared adults and 58% of cow–calf pairs were migratory (Osborne and Spindler 1993). Observations during more recent November moose surveys also indicate many bulls leave the river corridors following rut. Migratory movements by much of the moose population suggest moose mix freely throughout the KUCA and the surrounding game management unit, and occupy any vacant habitats. This is an important consideration for this proposal.

Changes in hunter success due to a different mode of access could be accommodated by adjusting the number of permits issued. Annual harvest is closely managed within sustainable levels by calculating the number of drawing permits awarded each year using annual moose population estimates, previous harvest levels, and hunter participation and success rates.

Additional considerations include: 1) Nonresident drawing permit holders without a guide and resident registration permit hunters were not considered for fly-in hunting opportunity under this proposal. 2) The logistics of handling the check-in/out procedure will be an important consideration for this proposal. Small planes may be required to land several times at a checkpoint to complete the check-out process, increasing traffic at smaller airports.

PROPOSAL 163

EFFECT OF THE PROPOSAL: Authorizes a predator control program in a small portion of Unit 24B.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: This is a Department proposal originally submitted to the Board as a placeholder. The following amendment establishes a predator control plan in Unit 24B and focuses wolf control activities in a 1,360 square mile Upper Koyukuk Moose Management Area.

Hunters in the Upper Koyukuk River drainage have experienced a decreasing moose population and increased difficulty in moose harvest for the last 15 years. The economic impact of increasing hunter effort required to harvest moose has been compounded by increasing fuel prices. Baseline biological data collected in Unit 24B since 1989 confirm the moose population is declining, corroborating concerns of local subsistence hunters. The Department has assessed the moose population decline in Unit 24B and has developed an Intensive Management Program that includes this wolf predation control plan to address the situation.

(X) Unit 24B Predation Control Area: the Unit 24(B) Predation Control Area is established and consists of those portions of the Koyukuk River drainage within Unit 24(B), encompassing approximately 13,523 square miles; this predation control program does not apply to any National Park Service or National Wildlife Refuge lands unless approved by the federal agencies; notwithstanding any other provisions in this title, and based on the following information contained in this section, the commissioner or the commissioner's designee may conduct a wolf population reduction or wolf population regulation program in Unit 24(B):

- (1) an Upper Koyukuk Management Area (UKMA) is established within the Unit 24(B) Predation Control Area encompassing approximately 1,360 square miles surrounding the villages of Alatna and Allakaket and bounded to the north at 66° 52' N. Lat., to the east at 152° 10' W. Long., to the south at 66° 10' N. Lat., to the west at 153° 45' W. Long.; the UKMA does not delineate a moose or wolf population and is not intended to distinguish animals within the UKMA from populations in Unit 24(B); the purpose of the UKMA is to focus wolf control in an area where moose are accessible to hunters, rather than spread this effort over the entire game management unit; wolf control will be conducted only within the UKMA, and the department will have the discretion to adjust its size and shape up to 20 percent (approximately 2,700 square miles) of Unit 24(B) if necessary;
- (2) this is an experimental program that will have limited impact on the moose and wolf populations in Unit 24(B); it is designed primarily to reallocate moose from wolves to humans in the UKMA and is expected to make only a small contribution to the intensive management (IM) moose harvest objective in Unit 24(B); at the end of the authorized period for removal of wolves, the control program will be terminated.
- (3) Moose and wolf objectives are as follows:
 - (A) the moose intensive management (IM) objectives established by the board for Unit 24(B) are for a population of 4,000–4,500 and an annual harvest of 150–250;
 - (B) the moose harvest objective for the UKMA is for an annual harvest of 35–40 moose by fall 2017;
 - (C) the wolf population control objective for Unit 24(B) is 100–140; the pre-control wolf population in Unit 24(B) was estimated in fall 2008 at 202–284; a minimum population of 100 wolves is approximately a 50 percent reduction from the pre-control population

and will assure that wolves persist as part of the natural ecosystem in Unit 24(B) and assure continued wolf hunting, trapping and viewing opportunities;

- (D) the wolf control objective in the UKMA is to reduce wolf numbers to the lowest level possible; in fall 2010, the estimated maximum number of wolves in the UKMA was 25-60;

(4) Board findings concerning populations and human use are as follows:

- (A) the Unit 24(B) moose population and harvest objectives have not been achieved;
 - (i) in early winter 2010 the observable moose population size in Unit 24(B) was estimated at 1,800–3,400 (0.13–0.25 moose per square mile), based on extrapolation of population estimates from survey areas in the unit, including all or parts of the UKMA, Kanuti National Wildlife Refuge, and Gates of the Arctic National Park and Preserve; during regulatory years 2008–2009 through 2010–2011, estimated annual harvest in Unit 24(B) was 82–109 moose;
 - (ii) in early winter 2010, the number of observable moose within the UKMA was estimated at 405 (90 percent confidence interval: ± 96); estimates of annual harvest from the UKMA are not available; however, Division of Subsistence household surveys from the villages of Alatna and Allakaket within the UKMA indicated moose harvest during 1997–2002 averaged approximately 40 per year; Division of Wildlife Conservation estimated current reported and unreported harvest in Alatna and Allakaket was 15–20 moose annually; based on resident testimonials, cost to obtain a moose has increased due to declining moose densities and increasing fuel costs;
- (B) predation by bears and wolves is an important cause of the failure to achieve moose population and harvest objectives;
 - (i) moose surveys in Unit 24(B) during spring 2008–2011 indicated high twinning rates (average 57 percent), thus good body condition; fall composition surveys in Unit 24(B) indicated high productivity, with calf:cow ratios averaging 44 calves per 100 cows, but cohort survival was low with yearling bulls averaging 11 per 100 cows; these survey data and a predicted calving rate of 80 percent indicate more calves are lost during summer (due primarily to bear predation) than winter (due primarily to wolf predation);
 - (ii) studies from Interior Alaska have documented bears as the primary source of neonatal moose mortality, whereas wolves are the primary predator of moose >12 months of age; based on radio-collared adults in Units 24(A) and 24(B) (2008–2009), annual adult mortality is approximately 8–10 percent;
- (C) a reduction of wolf predation within the UKMA can reasonably be expected to make progress towards achieving the Unit 24(B) intensive management objectives; modeling

of the current moose abundance in the UKMA using estimated abundance of 45–55 wolves, 75 black bears, 25 grizzly bears, 405 (± 97) moose, and a harvest of 20 moose annually, indicated that moose abundance should slowly increase in response to wolf control that increases calf and yearling moose survival; wolf control alone likely will result in a positive response in moose abundance after 5 winters of control, including reallocation of some surviving moose to harvest;

- (D) Reducing predation is likely to be effective and feasible utilizing recognized and prudent active management techniques and based on scientific information; based on survey results indicating wolf predation is an important source of mortality, reducing wolves in a small geographic area will likely result in increased moose survival and additional animals available for hunter harvest; harvest data will be collected using harvest ticket or registration permit reports, household surveys, and other reporting mechanisms such as calendars for recording hunting activities; moose population data collection will include abundance, calf:cow ratio, and yearling bull:cow ratio from population estimation surveys and calf survival and yearling survival from radio-collared moose;
- (E) Reducing predation is likely to be effective given land ownership patterns; the UKMA was selected based on land ownership status (minimizing federal lands), proximity to traditional moose hunting areas for the villages of Allakaket and Alatna (maximizing inclusion of navigable river corridors), and habitat suitability; within the UKMA, 125 square miles (9.2 percent) is federal land (BLM/USFWS), 576 square miles (42.3 percent) is Alaska Native corporation land, 659 square miles (48.4 percent) is State of Alaska lands;

(5) authorized methods and means are as follows:

- (A) hunting and trapping of wolves by the public in Unit 24(B) during the term of this program may occur as provided in the hunting and trapping regulations set out elsewhere in this title, including use of motorized vehicles as provided in 5 AAC 92.080;
- (B) notwithstanding any other provisions in this title, the commissioner may allow department employees to conduct aerial, land and shoot, or ground based lethal removal of wolves using state owned, privately owned, or chartered equipment, including helicopters, under AS 16.05.783;
- (C) notwithstanding any other provisions in this title, the commissioner may issue public aerial shooting permits or public land and shoot permits using fixed-wing aircraft as a method of wolf removal under AS 16.05.783;

(6) time frame is as follows:

- (A) during July 1, 2012–June 30, 2018, the commissioner may authorize removal of wolves in Unit 24(B);
- (B) annually, the department shall, to the extent practicable, provide to the board a report of program activities conducted during the preceding 12 months, including implementation

activities, the status of the moose and wolf populations, and recommendations for changes, if necessary to achieve the objectives of the plan;

(7) the commissioner will review, modify or suspend program activities when the wolf surveys or accumulated information from department personnel, hunters, trappers, and permittees indicate the need to avoid reducing wolf numbers in Unit 24(B) below the control objective of 100 wolves specified in this subsection;

PROPOSAL 164

EFFECT OF THE PROPOSAL: Eliminate the restriction on aircraft in the Kanuti Controlled Use Area (KCUA).

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue and the Department has no recommendation.

Because access within the Kanuti Controlled Use Area (KCUA) prohibits the use of aircraft by moose hunters, all moose hunters are concentrated on the same navigable waterways during the hunting season.

Harvest is low and there is adequate moose available for some additional harvest. Estimated annual harvest rate in 24B is low (avg. = 83 moose harvested) at 3.5% of the observable moose, and bull:cow ratios are high at 50–60 bulls:100 cows in November surveys. Nonlocal hunter harvest (avg. = 25.6 moose; 1.1% annual harvest rate) constitutes 30–35% of the total annual harvest. The moose population is stable at a low density (24B = 2,362 ± 730 moose/13,523 mi² = 0.12–0.23 moose/mi²; Kanuti NWR portion = 1,068 ± 122 moose/2,715 mi² = 0.35–0.44 moose/mi²). Federal lands within the KCUA have been closed to non-federally qualified users since 1992.

According to a memo from the Division of Game deputy director (May 27, 1981), the KCUA was established specifically to provide protection to local rural hunters (customary and traditional, C&T, uses) from undue competition from other hunters using aircraft. There is a positive C&T finding for moose in Unit 24. The board may wish to consider whether this proposal would negatively impact subsistence opportunity within the KCUA.

PROPOSAL 165

EFFECT OF THE PROPOSAL: Close all hunting for the Galena Mountain Caribou Herd in Unit 24.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The Galena Mountain Caribou Herd does not occur in Unit 24. The Galena Mountain Caribou herd occurs mostly in Unit 21D, with some of the herd periodically crossing over into Units 21B and 21C. Those portions of Units 21B, 21C, and 21D (Galena Mountain Caribou Herd range) were closed for conservation concerns by the Board at the recommendation of the Department in March 2004. Closure of any portion of Unit 24 would unnecessarily limit opportunity to harvest caribou from other herds in Unit 24. No harvest of the Galena Mountain Herd has been reported since 2000.

PROPOSAL 166

EFFECT OF THE PROPOSAL: Extend hunting season for wolves in Unit 21.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See recommendations for Proposal 167.

PROPOSAL 167

EFFECT OF THE PROPOSAL: Extend wolf hunting season in Units 21, 22, 24 to May 31.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: Unit 22 is not on the Board agenda for March 2012. We recommend this proposal be amended to include only Units 21 and 24. This proposal would align wolf hunting seasons with neighboring Units 19 and 20. There are no conservation concerns with extending the wolf hunting seasons from August 10–April 30 to August 10–May 31 in these units. We estimated 386–476 wolves occupied Units 21A and 21E during winter 2008–2009 and 442–771 wolves occupied Units 21B, 21C and 21D during winter 2007–2008, for a total of 828–1,247 wolves in all of Unit 21. We estimated 374–541 wolves in Unit 24 during winter 2007–2008. In regulatory year 2010–2011, reported harvest was 41 wolves in Unit 21 and 22 wolves in Unit 24, making up $\leq 9\%$ of the estimated population. Even with allowances for unreported harvest, there remains a harvestable surplus of wolves in Units 21 and 24.

PROPOSAL 168

EFFECT OF THE PROPOSAL: Allow brown bears to be taken over bait in Unit 21D.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: No biological concern exists with respect to this proposal because the brown bear population is likely stable and the annual harvest is below estimated harvestable surplus. Large portions of Unit 21D are forested, making bear hunting more challenging than in units with more open terrain. Access into the unit is primarily by boat, snowmachine, and aircraft.

Current black bear baiting seasons in Unit 21D in spring (April 15-June 30) and fall (August 1-October 25) allow for more effective harvest of this species. Reported harvest of grizzly bears in Unit 21D is low, with harvest averaging 5 bears per year (80% male) for the past 3 regulatory years (RY 2008–2009:3(2 males), RY 2009–2010:5(4 males), RY 2010–2011:7 (6 males).

PROPOSAL 169

EFFECT OF THE PROPOSAL: Extend lynx trapping season in Unit 21.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The Department recommends amending this proposal to include Unit 24. Extending the season from November 1–February 28 to November 1–March 31 will increase opportunity without concern of overharvest. Units 21 and 24 have a low human population and subsequently low annual harvest (<150 annually in Unit 21, <100 annually in Unit 24). Proposal 160 seeks to extend lynx season in neighboring Unit 19 to March 31 and adopting both proposals 160 and 169 will maintain season alignment.

PROPOSAL 170

EFFECT OF THE PROPOSAL: Shorten the moose hunting season in the Sheenjek and Coleen River drainages from September 5–25 to September 15–25.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Moose harvest data for Unit 25A demonstrates that the number of hunters, number of moose harvested and hunter success rates have been relatively stable over the past decade. Although variable between years, 85–119 hunters harvested 32–49 moose annually with success rates ranging 33–56% during 2001–2010. Harvest data for the Sheenjek and Coleen River drainages of Unit 25A also demonstrate stability in hunting pressure, harvest, and success rates over the past decade. During 2001–2010, 14–39 hunters harvested 5–15 moose annually (23–60% success) in the Sheenjek River drainage and in the Coleen River drainage 23–45 hunters harvested 8–19 moose (31–57% success).

Although there may be more hunters and fewer moose in localized areas along the Sheenjek and Coleen rivers, drainage-wide harvest data show no significant change in the number of hunters or moose harvested.

The Department has no data concerning wanton waste prevalence in Unit 25A and the Alaska Wildlife Troopers do not issue excessive wanton waste citations in Unit 25A compared to other Interior game management units. Department harvest data show that 60% of the harvest occurs after September 14 and 90% occurs after September 7.

The Department does not conduct moose population estimates in Unit 25A. However, moose densities are likely low (< 0.2 moose/mi²). Stability in the number of hunters and moose harvested combined with relatively high and stable success rates indicate that current harvest rates are likely sustainable.

There are positive customary and traditional (C&T) use findings for moose in portions of Unit 25 outside the Fairbanks nonsubsistence area. If adopted, this proposal would result in a reduction of subsistence opportunity and the Board may wish to identify whether a reasonable opportunity for subsistence uses would still be provided.

PROPOSAL 171

EFFECT OF THE PROPOSAL: For moose harvested in Unit 25A, all of the meat of the front quarters, hind quarters, and the ribs must remain naturally attached to the bone until transported from the field or processed for human consumption.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no data concerning wanton waste in Unit 25A, and the Alaska Wildlife Troopers do not issue excessive wanton waste citations in Unit 25A compared to other Interior game management units. Leaving the edible meat attached to the bone is commonly practiced by hunters, and some hunters remove the meat from the bone at kill sites or camps to facilitate packing or transporting from the field. Meat can be successfully salvaged for human consumption using either method when proper procedures are followed. However, neither method ensures adequate preservation. Many factors, including weather, cleanliness during field care and while transporting and the use of game bags affect the condition of meat when it arrives at the point of processing.

Moose occur at low density in Unit 25A and hunter access is difficult due to remoteness from roads. During regulatory years 2000–2001 through 2010–2011, 77% of hunters used aircraft to access the unit and 14% used boats. An average of 105 hunters harvested 42 moose per year and over 90% of hunters were nonlocal residents of Alaska (who reside outside of Unit 25A, 25B, or 25D) or nonresidents. Nonlocal hunters who use aircraft may experience transportation difficulties due to weight limitations if the Board adopts this proposal.

PROPOSAL 172

EFFECT OF THE PROPOSAL: For moose harvested in Unit 25B, all of the meat of the front quarters, hind quarters, and the ribs must remain naturally attached to the bone until transported from the field or processed for human consumption.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no data concerning wanton waste in Unit 25B, and the Alaska Wildlife Troopers do not issue excessive wanton waste citations in Unit 25B compared to other Interior game management units. Leaving the edible meat attached to the bone is commonly practiced by hunters, and some hunters remove the meat from the bone at kill sites or camps to facilitate packing or transporting from the field. Meat can be successfully salvaged for human consumption using either method when proper procedures are followed. However, neither method ensures adequate preservation. Many factors, including weather, cleanliness during field care and while transporting and the use of game bags affect the condition of meat when it arrives at the point of processing.

PROPOSAL 173

EFFECT OF THE PROPOSAL: For moose harvested in Unit 25D, all of the meat of the front quarters, hind quarters, and the ribs must remain naturally attached to the bone until transported from the field or processed for human consumption.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no data concerning wanton waste in Unit 25D, and the Alaska Wildlife Troopers do not issue excessive wanton waste citations in Unit 25D compared to other Interior game management units. Leaving the edible meat attached to the bone is commonly practiced by hunters. However, some hunters remove the meat from the bone at kill sites or camps to facilitate packing or transporting from the field. Meat can be successfully salvaged for human consumption using either method when proper procedures are followed. However, neither method ensures adequate preservation. Many factors, including weather, cleanliness during field care and while transporting and the use of game bags affect the condition of meat when it arrives at the point of processing.

PROPOSAL 174

EFFECT OF THE PROPOSAL: Open a registration moose hunt in the Firth and Mancha River drainages in Unit 26C for resident hunters for 1 bull during Sept 1–30 and for nonresidents 1 bull with 50 inch antlers or four or more brow tines during Sept 1–Sept 30.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The Department recommends amending proposal 174 by implementing a drawing hunt for both resident and nonresident hunters and setting a bag limit of 1 bull for residents and 1 bull with 50-inch antlers or 4 or more brow times on at least one side for nonresidents. We also recommend amending the season to September 1–25 for both resident and nonresident hunters. In addition, we recommend amending the proposal to include the Kongakut drainage, upstream of and including Drain Creek. The Department would issue up to 30 drawing permits with a harvest objective of 10 bulls. Additional limited hunt opportunity is warranted in

the Firth–Mancha and upper Kongakut drainages of Unit 26C based on recent moose surveys and current harvest levels.

Unit 26C state hunting seasons were closed beginning in 1996 in response to a North Slope-wide (Units 26A, 26B, and 26C) moose decline in the early 1990s. Moose seasons were also closed in Unit 26B and substantially restricted in Unit 26A. Gradually, during the 2000s, the North Slope moose population increased beginning in Unit 26A and subsequently in Unit 26B. In Unit 26A, hunting seasons were liberalized during that time and in 2006, resident-only moose hunting seasons were re-opened in Unit 26B. The Unit 26C moose season remained closed to non-federally qualified subsistence users because moose surveys conducted by Arctic National Wildlife Refuge (ANWR) staff along most drainages of the coastal plain in Unit 26C indicated the moose population had not recovered. During 2003–2009, 5 surveys were conducted, indicating a low and stable moose population ranging from 47 to 61 moose in northern Unit 26C. However, the upper Kongakut and Firth–Mancha drainages of Unit 26C were not surveyed and these areas historically contained the best moose habitat and the greatest number of moose.

Unit 26 has a positive finding for customary and traditional (C&T) use of moose. In 2006, the amount necessary for subsistence (ANS) was revised from 60–80 moose to 21–48, including 15–30 in Unit 26A. This suggests that 6–18 moose are reasonably necessary for subsistence opportunity in Units 26B and 26C.

Currently, a resident hunters-only drawing permit (DM996; up to 30 permits may be issued) and general season moose hunt (Feb. 15–April 15, up to a 14–day season may be announced by emergency order) occur in Unit 26B. Combined harvest from those hunts averaged 6 bulls annually during 2006–2011. A federal hunt occurs in Unit 26B and Unit 26C by residents of Kaktovik for 3 moose, provided no more than 2 antlered bulls may be harvested from Unit 26C, and no cow moose may be harvested from Unit 26C. This results in a harvest quota of 2 antlered bulls for Unit 26C. Three permits are issued annually and, on average, 1 moose is harvested per year in Unit 26C.

The 2011 moose population estimate for Units 26B and 26C combined is 850–1,000 moose (observable moose=854). In Unit 26B, annual moose surveys conducted by the Department in April during 2003–2011 indicated a stable population between 400–600 moose. As mentioned previously, surveys conducted by ANWR during 2003–2009 indicated approximately 55 moose on the coastal plain in Unit 26C. No ratio data are associated with these surveys because they were conducted in the spring. In fall 2011, the Department conducted a moose survey of the Firth–Mancha and upper Kongakut drainages in Unit 26C. In the Firth–Mancha, we observed 212 moose (60 bulls:100 cows, 27 calves:100 cows). In the upper Kongakut, we observed 127 moose (90 bulls:100 cows, 38 calves:100 cows). Prior to 2011, the most recent survey of the Firth–Mancha and upper Kongakut drainages was conducted by ANWR staff in 2002 when a total of 132 moose were observed in the Firth–Mancha and 95 moose were observed in the upper Kongakut. The 2011 survey resulted in an increase in observable moose from 227 moose in 2002 to 339 moose in 2011, indicating that there is a harvestable surplus of moose in Unit 26C above the 2 antlered bull harvest quota provided by the federal system for residents of Kaktovik. A 3% harvest rate of 850–1000 moose results in a harvestable surplus of 26–30 moose for Units 26B and 26C. This harvestable surplus exceeds the upper end of the presumed ANS of 6–18

moose in Units 26B and 26C. As a result, additional but limited nonsubsistence hunting opportunity may be feasible in the Firth–Mancha and upper Kongakut drainages of Unit 26C.

Historical harvest data in Unit 26C (1985–1995) indicated an average of 16 hunters hunted moose and harvested an average of 8.5 moose per year. Residents comprised 67% of hunters. In the Firth–Mancha and Kongakut portion of Unit 26C, an average of 2 hunters hunted per year.

If the Board of Game adopted this proposal as amended by the Department, the moose season would remain closed by federal regulation (except for federally qualified subsistence hunters) and the Department will not issue any drawing permits. The Department intends to request a federal closure review for the Firth–Mancha and upper Kongakut portion of Unit 26C at the next Federal Subsistence Board meeting in 2014. If the federal closure is removed, the Department will issue drawing permits.

Units and Bag Limit	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(24)		
...		
<u>Unit 26(C), that portion in the drainages of Firth Creek and Mancha Creek and the upper Kongakut River, upstream from and including Drain Creek</u>		
<u>RESIDENT HUNTERS</u>		
<u>1 bull by drawing permit only; up to 30 permits may be issued;</u>	<u>Sept. 1–25</u>	
<u>NONRESIDENT HUNTERS</u>		
<u>1 bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side; by drawing permit only; up to 30 permits may be issued;</u>		<u>Sept. 1-25</u>
<u>Remainder of Unit 26(C)</u>	No Open Season	No Open Season

PROPOSAL 175

EFFECT OF THE PROPOSAL: Increases the nonresident bag limit from 1 bull to 2 bulls for Porcupine Herd caribou in Units 25B, 25D, 26C, and the eastern portion of 25A.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal—see issue statement.

PROPOSAL 176

EFFECT OF THE PROPOSAL: Increases the nonresident bag limit from 1 bull to 2 bulls for Porcupine Herd caribou in Units 25B, 25D, 26C, and the eastern portion of 25A.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendations for proposal 175.

PROPOSAL 177

EFFECT OF THE PROPOSAL: Decrease the bag limit for caribou in Unit 26B from 5 caribou to 3 caribou.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: In RY10 the board provided additional hunting opportunity in the growing Central Arctic caribou herd (CAH) which was experiencing low harvest rates. The Board increased the resident and nonresident bag limit for caribou in most of Unit 26B from 2 to 5 caribou and extended seasons for both cows and bulls. The CAH had grown substantially from 32,000 caribou in 2002 to 67,000 caribou in 2008 with a reported harvest rate of $\leq 2\%$. In July 2010 the population was estimated at 70,000 caribou. Although harvest increased in RY10, the reported harvest rate remained the same at $\leq 2\%$ of the population.

Concerns by the public have arisen in that more caribou are harvested than what is accounted for in the reported harvest ticket system. The Department has taken these concerns into consideration and generously estimated an additional 800 caribou may have been harvested by a combination of hunters who did not return their harvest ticket and by hunters residing in local communities harvesting the CAH. Including these additional caribou still results in a low harvest rate of 3%.

RY10 harvest data indicate 1,573 hunters reported hunting and 846 harvested 1,188 caribou (54% success rate; 946 males and 216 females). This compares to RY05–RY09, prior to the 5-caribou bag limit, when an average of 1,300 hunters reported hunting and harvested an average of 745 caribou annually (57% success rate). Similar to previous years, a small proportion of hunters in RY10 were nonresidents (23%) who took approximately 23% of the harvest. The change in bag limit in RY10 resulted in 91% of successful hunters harvesting 1–2 caribou and

9% harvesting 3–5 caribou. An additional 107 caribou were harvested as a result of the bag limit being greater than 2 caribou.

Composition surveys in fall 2010 and 2011 resulted in high bull:cow ratios (50 bulls:100 cows in 2010 and 76 bulls:100 cows in 2011), further indicating that harvest did not have a measureable effect on the herd.

The 5-caribou bag limit likely had a small effect in attracting hunters to the CAH. The increased number of hunters in RY10 was at least partly the result of hunters displaced from the Fortymile caribou herd (where the hunt opened later in RY10 compared to previous years) and the Mulchatna Caribou Herd (whose population declined dramatically in recent years).

Wanton waste issues along the Dalton Highway in Unit 26B have been reported by the public in previous years. Although the Department has no database of reported wanton waste, we did not receive more wanton waste complaints from the public in RY10; nor did the Alaska Wildlife Troopers issue more wanton waste citations compared to prior to the increased bag limit.

PROPOSAL 178

EFFECT OF THE PROPOSAL: Closes the drainages of Red Sheep Creek and Cane Creek to sheep hunting in Unit 25A.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The Department has no biological concerns associated with the current general season or registration hunt and there is not a current biological basis to close these drainages to sheep hunting. There is a positive customary and traditional (C&T) use finding for sheep in Unit 25A.

Due to remoteness, the Cane and Red Sheep creek drainages of the Arctic Village Sheep Management Area (AVSMA) are accessible exclusively by aircraft. Since a federal closure was removed in 2006, hunter participation and harvest has been stable and sustainable under the current general season and registration permit hunt. Results of sheep surveys in portions of the AVSMA in 2006 and 2007 (by airplane) and 2008 (from the ground) by the U.S. Fish and Wildlife Service indicate that lamb productivity and proportion of rams in the population have been variable but stable and are similar to other areas surveyed in the eastern Brooks Range.

In 1991, the Federal Subsistence Board (FSB) established the AVSMA in Unit 25A in response to local hunters (residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik) concerned that nonlocal hunters were in conflict and interfered with sheep hunting by federally qualified subsistence users. The AVSMA included the area between Crow Nest and Cane Creeks, west of the East Fork Chandalar River to the Continental Divide and is entirely within Arctic National Wildlife Refuge (ANWR). The effect of the AVSMA was a closure to sheep hunting within its boundaries except by federally qualified subsistence hunters. In 1995, the AVSMA was expanded by the FSB northeast to include the entire drainages of Cane Creek and

Red Sheep Creek. Due to a lack of reported harvest or use of Cane and Red Sheep Creek drainages by local subsistence hunters, in 2006 the FSB temporarily removed the closure to this portion of the AVSMA for the fall season in the 2006–2007 regulatory year. This resulted in the state regulations once again being applicable in the Cane and Red Sheep Creek drainages of the AVSMA. In 2007, the FSB permanently lifted this closure. State regulations authorize the harvest of full-curl rams in an August 10–September 20 season for both Alaska residents and nonresidents. In addition, a state registration hunt (RS595) occurs in the eastern portion of Unit 25A, which includes Cane and Red Sheep Creek drainages during October 1–April 30 with a bag limit of 3 sheep.

Since the closure to non-federally qualified subsistence users was lifted in 2006 in Cane and Red Sheep Creeks, hunting pressure and harvest have been low. During 2006–2010, an average of 6 hunters harvested 4 full curl rams per year during the general season. No harvest from RS595 has occurred in Red Sheep or Cane Creek. Under the federal subsistence permit hunt (FS596), only 3 permits have been issued since 2006 and only 1 sheep has been harvested in the AVSMA. It is possible that subsistence use is underrepresented due to low harvest reporting.

PROPOSAL 179

EFFECT OF THE PROPOSAL: Create a sheep drawing permit hunt (8 permits) for nonresidents in the Dalton Highway Corridor Management Area in Units 24A and 26B.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between residents and nonresidents that should be decided by the Board, and therefore, the department has no recommendation. There are positive customary and traditional (C&T) use findings for sheep in Units 24 and 26.

In regulatory year 2009–2010 (RY09), guided nonresidents harvested 2 sheep within the Dalton Highway Corridor Management Area (DHCMA) in Unit 26B, and in RY10 guided nonresidents harvested 2 sheep within the DHCMA in Unit 24A. Guided nonresident sheep hunters had not reported harvesting sheep within the DHCMA prior to 2009. The proposer is concerned about competition among local residents of Wiseman and Coldfoot (who also qualify as subsistence hunters on federal lands), nonlocal residents, and guided nonresident hunters in this area.

The DHCMA extends 5 miles either side of the Dalton Highway and in state hunting regulations, this is an archery only area. The DHCMA and BLM land overlap; and federally-qualified hunters can use rifles for hunting on federal lands under federal regulations. In addition, bag limits and seasons differ in that the state hunting regulations have a bag limit of one ram, full curl or larger during Aug. 10–Sept. 20 and federal subsistence hunting regulations have a bag limit of one ram, 7/8 curl or larger during Aug. 10–Sept. 20. Also, federally-qualified hunters may also hunt within Gates of the Arctic National Park (GAAR) for 3 sheep during Aug. 1–Apr. 30.

In Unit 26B, during RY06–RY10, the Department estimated that a total of 2 sheep were harvested by Wiseman and Coldfoot residents (federally qualified hunters) using rifles. The

number of hunters from these 2 communities was 3–6 annually during RY06–RY08; with no hunters in RY09 and RY10. During the same time period, an additional 14 sheep were harvested (~ 3 sheep annually) by a combination of nonlocal residents and by 2 nonresidents. These 14 sheep were taken by bow and arrow.

In Unit 24A, during RY06–RY10, the Department estimated that a total of 9 sheep (~ 2 sheep annually) were harvested by Wiseman or Coldfoot residents (federally qualified hunters) using a rifle. The number of hunters from these 2 communities was 3–5 annually. During the same time period, an additional 10 sheep were harvested (2 sheep annually) by a combination of nonlocal residents and by 2 nonresidents. These 10 sheep were taken by bow and arrow.

There are other potential issues besides the direct competition for sheep within the DHCMA because many hunters access the area outside the DHCMA by walking through it in order to hunt with a rifle. Issues include hunters pushing sheep outside the DHCMA, thereby making them inaccessible to Wiseman and Coldfoot residents, and harvesting some of the legal rams along the border of the DHCMA. During RY06–RY10, the number of hunters who reported using a highway vehicle to access their hunt areas in Unit 26B ranged from 70 to 91 with harvest of 8–15 sheep. In Units 24A and 25A combined, the number of hunters was 41–50 with harvest of 7–17 sheep. These figures include those hunters hunting within the DHCMA, except for Wiseman and Coldfoot residents.

PROPOSAL 180

EFFECT OF THE PROPOSAL: Open the wolf trapping seasons earlier in Units 25A, Unit 25B, and Unit 25C (from November 1–April 30 to October 1–April 30).

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Current wolf trapping seasons in Interior and eastern North Slope units open November 1, when fur quality is prime, except in units where the Board has determined that additional harvest of wolves is warranted to promote intensive management objectives. Although changing the opening date of wolf trapping season to October 1 for Units 25A, 25B, and 25C would align them with Unit 25D, inconsistencies in the starting date of wolf trapping season would still exist with neighboring units where the wolf trapping seasons start on November 1 (Units 20B, 20F, 24A, 26B, and 26C).

This proposal does not specify gear restrictions. However, in units where the wolf trapping season opens on October 1 (Units 19D, 21A, and 25D), steel traps and snares smaller than 3/32 inch in diameter are prohibited during the October portion of the season. Gear restrictions for the October portion of the season were adopted by the Board of Game to reduce incidental catch of other furbearers for which the season is closed.

Annual reported harvest from sealing records during 2000–2010 was 33–63 wolves per year and averaged 42 wolves per year for Units 25A, 25B and 25C combined (excludes wolves taken during predator control in the western portion of Unit 25C in the Upper Yukon–Tanana predation

control area). Wolf surveys have not been conducted recently in these units. However, wolf densities likely range from 8–12 wolves per 1000 mi² based on wolf surveys conducted in adjacent Unit 25D where prey availability is similar to 25AB&C. Harvest rates from the current trapping season are below sustainable levels and additional harvest from an October season would likely be low and sustainable.

PROPOSAL 181

EFFECT OF THE PROPOSAL: Extend brown bear seasons in Unit 26B by applying the registration hunt to the entire unit for both resident and nonresident hunters.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: This is a Department proposal. We proposed liberal, year-round, hunting seasons for both residents and nonresidents to increase brown bear harvest in order to reduce brown bear predation on muskoxen. However, during the statewide Board of Game meeting in January 2012, the Board authorized a predation control program in which Department personnel will select and lethally remove bears identified as killing or threatening muskox, in accordance with a Muskox Recovery Plan. Under this targeted approach, liberal hunting seasons are not necessary to provide predation relief for muskoxen.

Therefore, the Department recommends amending this proposal to: 1) shorten brown bear hunting seasons in Unit 26B to August 25–May 31 for both resident and nonresident hunters; 2) expand the registration permit for resident hunters to include all of Unit 26B; 3) establish a nonresident drawing permit in all of Unit 26B; and 4) retain the limit of up to 20 nonresident brown bear drawing permits. We plan to issue 12 nonresident drawing permits the first year. These proposed seasons are directed at providing opportunity to harvest brown bears at a sustainable harvest rate. However, if harvest exceeds sustainability (including bears taken in the predator control program), the Department will adjust seasons the following year via permit hunt discretionary authority.

In an effort to reduce brown bear predation on muskoxen in Unit 26B, brown bear regulations were liberalized in regulatory year (RY) 2010–2011 by emergency order and in RY 2011–2012 via a special Board of Game meeting. The season was opened on August 10 (15 days early) in RY 2010–2011. In RY 2011–2012, a registration hunt for brown bears was created with no closed season for both resident and nonresident hunters. The season in the remainder of Unit 26B opened September 1 and nonresidents were required to obtain a drawing permit. The liberalized seasons in the registration permit area during RY 2010–2011 and RY 2011–2012 resulted in a 2-year average annual harvest of 25 bears with 16 males and 9 females (35% female). Resident hunters harvested an average of 18 bears and nonresidents harvested an average 6 bears annually. When the season opened on August 25 in RY 2008–2009 and RY 2009–2010, the 2-year mean harvest was 20 bears (14 males and 6 females). Resident hunters harvested an average of 16 bears and nonresidents harvested an average 4 bears.

Sustainable harvest rates are estimated to be $\leq 8\%$ of the population of 265 bears ≥ 2 years old. This is estimated to be 21 bears, no more than 8 of which can be females. The harvest objective is to maintain a 3-year mean annual human-caused mortality of $\leq 8\%$ of the bears ≥ 2 years old and of which no more than 40% can be females. We expect that season dates of August 25–May 31 will achieve maximum brown bear hunting opportunity while remaining within sustainable harvest rates.

Changes to 5AAC 85.025 are:

Units and Bag Limit	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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(24)

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Unit 26(B)[, THAT PORTION INCLUDING THE KADLEROSHILIK RIVER DRAINAGE SOUTH AND EAST OF THE PRUDHOE BAY CLOSED AREA, AND INCLUDING THAT PORTION OF THE ECHOOKA, IVISHAK LUPINE, AND RIBDON RIVER DRAINAGES AND THE ACCOMPLISHMENT CREEK DRAINAGE NORTH OF A LINE BEGINNING AT 69 DEGREES 08.97 MINUTES NORTH LATITUDE, 146 DEGREES 50.36 MINUTES WEST LONGITUDE ON THE DIVIDE BETWEEN THE ECHOOKA AND SHAVIOVIK RIVER DRAINAGES AND ENDING AT 68 DEGREES 35.71 MINUTES NORTH LATITUDE, 148 DEGREES 29.64 MINUTES WEST LONGITUDE, EXCLUDING THE ACCOMPLISHMENT CREEK DRAINAGE SOUTHWEST OF A LINE FOLLOWING THE WEST BANK OF ACCOMPLISHMENT CREEK FROM 68 DEGREES 35.71 MINUTES NORTH LATITUDE, 148 DEGREES 29.64 MINUTES WEST LONGITUDE TO THE CONFLUENCE OF ACCOMPLISHMENT CREEK

AND THE SAGAVANIRKTOK RIVER
AT 68 DEGREES 42.19 MINUTES
NORTH LATITUDE, 148 DEGREES,
54.47 MINUTES WEST LONGITUDE,
AND INCLUDING THAT PORTION OF
THE SAGAVANIRKTOK RIVER
DRAINAGE SOUTH OF THE PRUDHOE
BAY CLOSED AREA AND NORTH
OF 68 DEGREES 42.19 MINUTES
NORTH LATITUDE (CROSSING
THE DALTON HIGHWAY NEAR
MILEPOST 300), AND INCLUDING
THAT PORTION OF THE KUPARUK
AND TOOLIK RIVER DRAINAGES
SOUTH OF THE PRUDHOE BAY
CLOSED AREA AND NORTH OF A LINE
AT 68 DEGREES 42.19 MINUTES,
NORTH LATITUDE, EXCLUDING
TRIBUTARY DRAINAGES FLOWING
INTO THE KUPARUK RIVER NORTH
OF THE CONFLUENCE OF THE
KUPARUK AND TOOLIK RIVERS
AND WEST OF THE WEST BANK
OF THE KUPARUK RIVER.]

RESIDENT HUNTERS:

1 bear per regulatory
year by registration permit
only

Aug. 25–May 31
[JULY 1–JUNE 30]

NONRESIDENT HUNTERS:

1 bear per regulatory
year by **drawing** [REGISTRATION]
permit only, **up to 20 permits**
may be issued

Aug. 25–May 31
[JULY 1–JUNE 30]

[REMAINDER OF UNIT 26(B)]

[RESIDENT HUNTERS:]

[1 BEAR EVERY
REGULATORY YEAR]

[SEPT. 1 - MAY 31]

[NONRESIDENT HUNTERS:]

[1 BEAR EVERY

[SEPT. 1 - MAY 31]

REGULATORY
YEAR BY DRAWING
PERMIT ONLY; UP TO
20 PERMITS MAY BE
ISSUED]

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PROPOSAL 182

EFFECT OF THE PROPOSAL: Increases the black bear bag limit in Unit 25D from 3 to 5.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Additional opportunity to harvest black bears in Unit 25D through an increased bag limit of 5 is biologically sustainable. Also, based on the history of liberalized opportunity to harvest black bears in Unit 25D, a significant increase in harvest or reduction in bear abundance is not likely to occur.

In 2010, the Department conducted an aerial mark–recapture survey to estimate black bear abundance in a 530 mi² area centered on the village of Beaver in western Unit 25D. Preliminary results indicate that black bear density is high, likely >40 black bears not accompanied by cubs/100 mi². Final results will be available at the March 2012 Board of Game meeting. Habitat in much of the remainder of Unit 25D is similar to the area surveyed and likely supports similar black bear abundance. Upland habitats on the northern and southern extent of Unit 25D likely support fewer black bears.

Current harvest likely is less than 70 black bears annually, well below sustainable levels. Harvest report and sealing are not required for black bears harvested in Unit 25D. However, a subsistence household survey of communities in 2008 estimated annual harvest to be 26 per year. Additional harvest from nonlocal resident hunters and guided nonresident hunters likely is 20–40 annually.

Current black bear seasons and bag limits in Unit 25D are more liberal than most Interior units, including an any-bear bag limit, a fall baiting season, the use of artificial light at den sites, and a community subsistence harvest permit hunt (there is a positive customary and traditional use finding for black bears in Unit 25) Providing maximum opportunity to harvest black bears in Unit 25D has been a long-term objective of local residents and the Yukon Flats Advisory Committee and is supported by the Yukon Flats Cooperative Moose Management Plan.

PROPOSAL 183

EFFECT OF THE PROPOSAL: Create a brown bear community subsistence harvest permit for Unit 25D.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The Department recommends amending this proposal to increase the bag limit to 2 bears per year for resident hunters, instead of adopting a community subsistence harvest permit for brown bear. Additional opportunity to harvest brown bears in Unit 25D through an increased bag limit of 2 bears for resident hunters is biologically sustainable. However, because there is a negative customary and traditional use (C&T) finding for brown bears in Unit 25; the Board cannot establish a subsistence hunt, such as community subsistence harvest, for brown bears in any part of Unit 25. To do that, a proposal must first be submitted during the next Board cycle indicating that new information exists regarding C&T uses in Unit 25D. The Division of Subsistence would then develop a C&T worksheet to present to the Board, who then could make a determination.

In proposal 183, the Eastern Interior Regional Advisory Council (EIRAC) proposed a community subsistence harvest permit system to address traditional hunting patterns whereby a few hunters in a community who do most of the brown bear hunting would not be restricted to a bag limit of 1 per year. A companion to proposal 183 was submitted to the Federal Subsistence Board (FSB). However, during a meeting in October 2011, the EIRAC amended their FSB proposal to maintain the federal subsistence hunt as a general subsistence hunt and increase the bag limit to 2 brown bears per year. If the Board of Game adopts this amendment to proposal 183, state and federal bag limits would remain aligned, as envisioned by the EIRAC.

Few brown bears are taken by nonlocal hunters (1–4 per year during regulatory years 2005–2006 through 2010–2011). Harvest surveys conducted by the Council of Athabaskan Tribal Governments indicated that more bears are taken by local hunters (0–5 brown bears annually during regulatory years 1993–1994 through 2002–2003 and regulatory year 2008–2009, 22 in regulatory year 2005–2006 and 37 in regulatory year 2006–2007). In some years hunters may have been motivated to take more brown bears compared to other years.

The population estimate for brown bears in Unit 25D is 387. If this proposal is adopted, the 3-year mean annual human-caused mortality would likely remain $\leq 8\%$ of the population (31 bears). Although our management objective for brown bears in Unit 25D is to temporarily reduce brown bear numbers and predation on moose, the Department believes it is unlikely that an increased bag limit would result in a substantial increase in the harvest of bears. The current season dates (RESIDENT: 1 Jul–30 Nov and 1 Mar–30 Jun; NONRESIDENT: 1 Sep.–30 Nov. and 1 Mar.–15 June) would remain the same.

We recommend the Board adopt this alternative solution to provide a 2 bear bag limit in Unit 25D for residents to accommodate traditional hunting patterns, as follows:

5AAC 85.020. Hunting seasons and bag limits for brown bear.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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(23)

Unit 25(D)

RESIDENT HUNTERS:

2 bears every regulatory year

July 1–Nov 30

Mar. 1–June 30

NONRESIDENT HUNTERS.

1 bear every regulatory year

Sept. 1–Nov. 30

Mar. 1–June 15

[JULY 1–NOV. 30

MAR. 1–JUNE 30

SEPT. 1–NOV. 30

MAR. 1–JUNE 15]

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PROPOSAL 184

EFFECT OF THE PROPOSAL: Allow the use of crossbows in the Dalton Highway Corridor Management Area.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The Board reviewed proposal 54 during the statewide meeting in January 2012, which sought to expand the definition of bow to include crossbows. The Department recommends the decision the Board of Game made on that proposal carry forth for this proposal. This would maintain consistency among archery-only areas.

Currently, a hunter can submit a methods and means exemption application to use a crossbow or draw-lock in an archery-only hunt by explaining how his/her disability limits his/her ability to comply with the methods and means restriction at issue.

PROPOSAL 185

EFFECT OF THE PROPOSAL: Allow the taking of small game by falconry in the Dalton Highway Corridor Management area.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The Board acted on Proposal 95 in the January 2012 Statewide meeting to allow this.

PROPOSAL 186

EFFECT OF THE PROPOSAL: Establish a joint state–federal registration permit and align hunting season dates and bag limits for moose in portions of Units 11 and 12 accessible from the Nabesna Road.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: Under current state and federal regulations there are 4 different sets of moose season dates and bag limits in the portions of Units 11 and 12 accessible from the Nabesna Road (NRD). There are positive customary and traditional (C&T) use findings for moose in Units 11 and 12. In addition, federally-qualified subsistence hunters in Unit 11 must have a federal registration permit, but a state harvest ticket is required for federal hunters in the adjacent portion of Unit 12, and state hunters are required to use a state harvest ticket in both units along the Nabesna Road. Under this system, moose hunters must understand which harvest ticket or permit and which of the 4 sets of season dates and bag limits apply to them. This has caused hunter confusion and law enforcement difficulties. Further, harvest data collection is split between 2 ADF&G offices and a federal agency, resulting in delays in compiling harvest summaries.

This proposal would align the area-wide resident and nonresident state seasons accessible from the NRD in Units 11 and 12 to August 24–28 and September 8–17 to match the current resident season in the NRD portion of Unit 12. This would shorten the resident and nonresident season in the NRD portion of Unit 11 from a 32-day, Aug 20–September 20 season to a shorter 15–day spilt season and lengthen the nonresident season in the NRD portion of Unit 12 from a 10–day September 8–17 season to the longer 15–day spilt season. The proposal would also align the NRD bag limit to one bull with spike-fork or 50-inch antlers or antlers with at least 4 brow tines on one side for both resident and nonresident hunters. This would result in more restrictive antler requirements for residents in the NRD portion of Unit 12 and for both resident and nonresident hunters in Unit 11, but it would liberalize the bag limit for nonresidents in the NRD portion of Unit 12. Proposals currently before the federal subsistence board are expected to liberalize antler restrictions and increase season length for federal subsistence hunters in the NRD portion of Unit 12.

The moose population in the NRD portions of Units 11 and 12 is likely stable at low density. During 2003–2008, Wrangell St. Elias National Park (WSENP) staff monitored moose in Unit 11 from the Boulder Creek drainage east to Copper Lake. No moose surveys were conducted in the NRD portion of Unit 11. To better understand the moose population accessible to hunters in this area, a cooperative project between the Department and WSENP deployed radio collars on 22 moose in October 2011. An intensive moose survey incorporating radio collar information was conducted in this area in late November. Information from this survey indicates a density of 0.79 moose per square mile, with 34 bulls:100 cows and 27 calves:100 cows.

Although numbers of hunters fluctuated (range 105–160) between 2000–2009, harvest and the distribution of harvest between Alaska residents, nonresidents and federally qualified subsistence users appears to have remained stable in the NRD area over the past 10 years. During 2000–2009 moose harvest averaged 23 moose (range 14–33). Non-federally qualified Alaska residents averaged 9 moose, nonresidents averaged 4 moose, and federally qualified subsistence users averaged 10 moose.

The Nabesna Road–Tok Cutoff and Copper Basin Advisory Committees recently expressed concerns that this proposal is overly conservative. Recent moose survey results also indicate the moose population can likely sustain a more liberal season and bag limit. Therefore, the Department recommends establishing a single joint state-federal registration hunt for residents with a bag limit of one bull with spike-fork or 50-inch antlers or antlers with at least 3 brow tines on one side, and an August 20 – Sept 17 season. The Department also recommends establishing an August 24 – Sept 17 season for nonresidents, with a bag limit of one bull with 50-inch antlers or antlers with at least 4 brow tines on one side. These amendments should alleviate concerns by Unit 11 hunters that season length is being unnecessarily shortened, while conserving the bull:cow ratio. However, since adoption of this amendment may represent a restriction in subsistence opportunity, while simultaneously increasing nonresident opportunity, the Board should consider whether these amendments provide reasonable opportunity for continued subsistence uses pursuant to the subsistence priority law.

PROPOSAL 187

EFFECT OF THE PROPOSAL: Impose antler restrictions for moose hunting in portions of Unit 12 to align with moose harvest limits in Unit 11.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendations for proposal 186.

PROPOSAL 188

EFFECT OF THE PROPOSAL: Allocate a fixed 10 percent of the Tok Management Area Dall sheep permits to nonresidents.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: Also see analysis and recommendation for proposal 189. This is an allocation issue that should be determined by the Board, and therefore, the Department has no recommendation.

Currently, up to 10% of the Tok Management Area (TMA) Dall sheep permits are allocated to nonresident hunters each year. Residents and nonresidents are selected at random from the same

applicant pool. Once 10% of available permits are awarded to nonresidents, any remaining permits are issued to residents only.

Prior to 2006, increasing numbers of nonresident applications, and a larger proportion of permits allocated to nonresident hunters resulted from the ability of applicants to apply on the internet. In 2006 the Board passed a proposal limiting nonresidents to a maximum of 10% of permits issued. This insures that resident hunters continue to have a higher probability of receiving these valued permits, and addressed concerns of high harvest of full-curl rams due to the disproportionately high success rates of guided nonresident hunters.

Since 2007, 10% of permits issued have been awarded to nonresidents each year. This proposal would not change the current distribution of permits. As long as nonresident applicants continue to exceed 10% of Alaska resident applicants, no more than 10% of permits will continue to be allocated to nonresident hunters.

PROPOSAL 189

EFFECT OF THE PROPOSAL: Restrict Dall sheep hunting in the Tok Management Area and the Delta Controlled Use Area to Alaska residents only.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the Board, and therefore, the Department has no recommendation.

Hunting pressure in the Tok Management Area (TMA) and Delta Controlled Use Area (DCUA) is controlled by drawing permit. Sheep populations in both areas are stable, hunter success rates are above 45% in both areas and trophy rams are harvested by Alaska residents each year under the current management strategy.

Up to 10% of TMA Dall sheep permits are allocated to nonresident hunters each year. The number of sheep permits awarded to nonresidents in the DCUA is not limited; however, the majority of applicants remain Alaska residents.

Large numbers of nonresident applications for the TMA, and a larger proportion of permits allocated to nonresident hunters resulted in the Board passing a proposal in 2006 that limits nonresidents to a maximum of 10% of permits. This insures that resident hunters continue to have a higher probability of receiving these valued permits than nonresidents. It also addresses concerns of high harvest of full-curl rams due to the disproportionately high success rates of guided nonresident hunters.

At current harvest levels, nonresident hunters are not preventing Alaska resident hunters from harvesting trophy rams in the TMA or DCUA. In 2010, the number of TMA sheep permits was reduced from 100 to 80 following 3 years in which $\leq 7\%$ of harvested rams had horns ≥ 40 inches in length. Following these changes, harvest of rams with horns ≥ 40 inches in length increased to

11% in 2010 and 23% in 2011. In 2011, hunters harvested 7 rams (5 by Alaska residents) with horns \geq 40 inches in length, The average horn length of harvested rams was 37.5 inches, the longest average horn size since the TMA was established in 1974. The largest ram harvested in 2011 was taken by an unguided Alaska resident and had horns $>$ 44 inches. During 2007–2011 TMA sheep hunters have harvested an average of 37 rams (range = 27–44 rams), with resident hunters accounting for 78% (range = 74–85%) of the harvest.

During 2007–2011 the department issued 150 DCUA sheep permits each year, with an average of 9.4% of the permits issued to nonresident hunters (range 7–11%). Hunters harvested an average of 48 rams (range 37–55 rams), with resident hunters accounting for 85% (range 83–88%). An average of 2 rams (range 1–6) with horns $>$ 40 inches were harvested each year in the DCUA during this period.

Even with nonresident hunters eliminated, TMA and DCUA permits would remain difficult to obtain. For example, in 2010 there were 5680 TMA applicants, 609 of whom were nonresidents. With nonresidents removed from the TMA applicant pool, the chance of a resident being drawn would have changed from 1.2% to 1.3% for the early season (DS102) and from 1.7% to 1.9% for the late season (DS103). In the DCUA the chance of a resident being drawn in 2010 would have changed from 4.3% to 4.5% for the early season (DS203) and from 3.4% to 3.7% for the late season (DS204).

PROPOSAL 190

EFFECT OF THE PROPOSAL: Restrict Dall sheep hunting in the Tok Management Area and the Delta Controlled Use Area to Alaska residents only.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 189.

PROPOSAL 191

EFFECT OF THE PROPOSAL: In Unit 20E moose drawing hunts DM794 and DM796, extend the season 10 days and restrict harvest to bulls with 50-inch antlers or 4 or more brow tines on one side.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no biological concern regarding this proposal. The hunt areas for DM794 and DM796 are located in remote portions of the Ladue River Controlled Use Area (LRCUA). These hunts were established to allow additional opportunity to hunt moose in portions of the LRCUA that are largely inaccessible to hunters during the fall hunt. However, the proposer states that these hunts were originally intended to be trophy hunts and therefore the bag

limits should have an antler restriction. Implementing an antler restriction in this hunt is an allocation issue that should be determined by the board.

In 2011, the bull:cow ratio in this area was estimated at 61 bulls:100 cows (management objective 40 bulls:100 cows), with a density estimate of 0.5/moose mi². During the past 5 years, harvest averaged 0.2 bulls annually in DM794 and 1.2 bulls in DM796. This moose population can likely sustain a higher harvest rate that may result from extending this hunting season from 30 days in November to 40 days, ending December 10. The proposed antler restrictions will likely mitigate potential increase in harvest associated with the longer season.

PROPOSAL 192

EFFECT OF THE PROPOSAL: Modify hunt boundaries, hunt type, season dates, and harvest limits for the White Mountains and Fortymile Caribou Herds in Units 20B, 20D, 20E, 20F and 25C.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: This proposal is based on recommendations in the revised 2012–2018 Fortymile Caribou Herd Harvest Plan (harvest plan), which the Fortymile Caribou Herd Harvest Management Coalition will present to the Board at the March 2012 meeting in Fairbanks. See proposal 192 issue statement for details. The changes recommended in proposal 192 are needed to fully implement the revised harvest plan. The department supports the revised harvest plan and these proposed regulatory changes, which will provide the flexibility needed to respond quickly to changing management needs of the Fortymile Caribou Herd as it continues to increase in size and expand its range.

The department provided technical and financial support to the Fortymile Caribou Herd Harvest Management Coalition who worked together to develop the revised harvest plan. The coalition included representatives from the Eagle, Central, Fairbanks, Delta, Upper Tanana–Fortymile, Anchorage, and Matanuska Valley advisory committees, the Eastern Interior Regional Advisory Council (EIRAC), as well as Canadians from Tr’ondëk Hwëchîn, Yukon Fish and Wildlife Management Board, and Yukon Department of Environment.

PROPOSAL 193

EFFECT OF THE PROPOSAL: Modify season opening date in a portion of the hunt area and close the fall season within one mile of during the fall season for the Fortymile Caribou Herd in Units 20B, 20E, and 25C.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 192.

PROPOSAL 194

EFFECT OF THE PROPOSAL: Establish a youth-only hunt for Fortymile caribou during August 10–15 in Units 20B, 20D, 20E, and 25C.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 192.

PROPOSAL 195

EFFECT OF THE PROPOSAL: Prohibit proxy hunting for all Fortymile and White Mountain caribou hunts in Units 20B, 20D, 20E, 20F and 25C.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: This proposal is based on recommendations in the revised 2012–2018 Fortymile Caribou Herd Harvest Plan (harvest plan), which the Fortymile Caribou Herd Harvest Management Coalition will present to the Board at the March 2012 meeting in Fairbanks. See proposal 195 issue statement for details. The change recommended in proposal 195 is needed to fully implement the revised harvest plan. The department supports the revised harvest plan and this proposed regulatory change.

The department provided technical and financial support to the Fortymile Caribou Herd Harvest Management Coalition who worked together to develop the revised harvest plan. The coalition included representatives from the Eagle, Central, Fairbanks, Delta, Upper Tanana–Fortymile, Anchorage, and Matanuska Valley advisory committees, the Eastern Interior Regional Advisory Council (EIRAC), as well as Canadians from Tr’ondëk Hwëchîn, Yukon Fish and Wildlife Management Board, and Yukon Department of Environment.

PROPOSAL 196

EFFECT OF THE PROPOSAL: Allow grizzly bear baiting in Units 12 and 20E under general hunting regulations during April 15–June 30.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no biological concern regarding this proposal. Grizzly bear baiting was allowed under the Upper Yukon–Tanana (UYT) predation control program in the most accessible portion of southern Unit 20E during spring 2005 through spring 2009. It was suspended because only 5 grizzly bears were taken during the entire program.

Taking bears under general hunting regulations is difficult over most of these units because of thick vegetation and rough topography. The majority of grizzly bears are taken incidental to

hunts for other species. During regulatory years 2001–2002 through 2010–2011, average take was 18 grizzly bears in Unit 12 and 14 in Unit 20E, including all hunting and predation control methods. Based on take under the UYT predation control program, we anticipate that few grizzly bears would be harvested over bait under bear baiting hunting seasons.

The current population estimates are 350–425 grizzly bears in Unit 12 and 320–394 in Unit 20E. While densities vary throughout these units, the overall grizzly bear densities are relatively low due to the lack of salmon availability. However, take is consistently below the estimated sustainable level of 5–8%.

PROPOSAL 197

EFFECT OF THE PROPOSAL: Re-implement brown bear control in a portion of the Upper Yukon Tanana Predator Control Program in southern Unit 20E. Allow foot-snaring with bait, same-day-airborne take of brown and black bears at bait sites, take of any bear, and sale of tanned hides.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The department does not support re-implementing brown bear control as part of the Upper Yukon/Tanana Predation Control Area (UYTPCA) at this time. We agree that another attempt to control brown bears should be made, given the availability of additional control methods. However, due to the demanding logistics involved in such a program, some level of cooperative department support will likely be required for success. In addition, we are concerned that effectiveness of wolf control in the UYTPCA could be jeopardized if too much funding and personnel are reallocated to a bear control program. We expect to collaborate with the proposer before the 2014 Board meeting to explore solutions.

The UYTPCA was established to increase the Fortymile Caribou Herd throughout its range and the moose population in Unit 12 north of the Alaska Highway and in Unit 20(E) to aid in achieving intensive management (IM) objectives. The current program includes only wolf control.

Fortymile herd size has increased to the lower end of the IM population objective, but the IM harvest objective has not been achieved. Significant work remains to be done, and substantial Departmental resources will be required to make additional progress.

While progress has been made toward achieving moose IM objectives, they have not been achieved because wolf control alone has not resulted in a rapid increase in the moose population. Brown bear predation on calves was identified as the single most important limiting factor for moose. This was recognized when the UYTPCA was first established in 2005 and brown bear predation control was part of the program. However, bear control was suspended in 2009 because it was ineffective at reducing brown bear predation on moose calves. The bear control program was conducted by the public under permits issued by the Department. When it was suspended, individual permits allowed: no limit on the number of brown bears taken, but no take

of cubs and females accompanied by cubs; use of bait; use of same-day-airborne at bait sites, if the permittee was at least 300 ft. from the aircraft; and sale of untanned hides. At the time of suspension, the Department recommended re-implementing the bear control program if more effective methods became available. The Board has recently approved additional methods for other programs that may improve effectiveness of brown bear control in the UYTPCA. These include: take of any bear, including sows and cubs; snaring with bait; and sale of tanned hides. Efficient ways to implement these methods without jeopardizing continuing success of the UYTPCA program will be explored with the proposer.

PROPOSAL 198

EFFECT OF THE PROPOSAL: Lengthen fox trapping season in Units 12 and 20E to align with the coyote season, including snare and trap restrictions in October and April.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 149.

PROPOSAL 199

EFFECT OF THE PROPOSAL: Extend the end of hunting seasons for lynx and fox in Units 12 and 20E from March 15 to April 30.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Fur quality of most lynx taken after March 15 is generally poor. Fox are also less desirable during March and April because hide quality is greatly diminished. Additionally, snowshoe hare numbers are declining and the low in the lynx-hare cycle is expected to occur in the next 2-3 years. Extending the hunting season to April 30 has potential to slow recovery.

Lengthening hunting seasons through April will remove some fox and lynx which have survived the winter and are preparing to breed. During regulatory years 2006-2007 through 2010-2011 an average of 6 lynx were harvested annually by hunting in Units 12 and 20E combined. Because there is no sealing requirement for fox in Units 12 or 20E, harvest numbers are poorly documented. Based on information from trapper questionnaires and trapper interviews, we assume that the take of fox by hunters is also low.

PROPOSAL 200

EFFECT OF THE PROPOSAL: Amend the amount reasonably necessary for subsistence (ANS) uses for wolves in Unit 12.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The Board reviewed the ANS amounts for furbearers and fur animals statewide at the January meeting in 2012. They found that 90% of the allowable harvest was the ANS amount.

PROPOSAL 201

EFFECT OF THE PROPOSAL: Reauthorize antlerless moose hunting seasons in Unit 20D.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal; see issue statement.

PROPOSAL 202

EFFECT OF THE PROPOSAL: Allow the taking of Delta bison the same day airborne.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The department has no biological concerns regarding this proposal. Few hunters would likely hunt the same day they are airborne. Therefore, it is not likely that average hunter success would increase above the current range of 60–75%. However, if hunter success rates increase and the harvest exceed sustainable levels, we will decrease the number of permits issued.

The proposal cites declining harvest success as a reason to consider same-day airborne hunting assistance for bison hunters. However, there is not a recent decrease in hunter success. It has fluctuated over the past 13 years, but there is not a downward trend during this time period. The average success rate since regulatory year 1998–1999 has been 68%. However, it was higher in the mid 1990s (4-year average from RY 1994-1997 = 90%). The 2010 pre-calving population estimate for the Delta bison herd was 339 animals, slightly below the population objective of 360. The herd has been at or below the population objective since 2009.

The Alaska Wildlife Troopers have indicated that it would be very difficult to know if Delta bison hunters are using air-to-ground communication. Additionally, due to the 6 month length of the Delta bison hunt, it would be difficult to track aircraft use for bison hunting, including use of unimproved airstrips.

If the Board chooses to adopt this proposal, we recommend the following amendment: restricting same-day-airborne hunters to the Delta D66 airstrip. This will allow hunters to conduct reconnaissance flights to and from the main public air field in Delta Junction, and then pursue bison from the ground after returning to Delta D66.

92.085. Unlawful methods of taking big game; exceptions.

The following methods and means of taking big game are prohibited in addition to the prohibitions in 5 AAC 92.080:

...

8) a person who has been airborne may not take or assist in taking a big game animal until after 3:00 a.m. following the day in which the flying occurred; however, this paragraph does not apply to

...

(G) taking bison in Unit 20(D), for persons departing from and returning to Delta D66 airstrip.

...

PROPOSAL 203

EFFECT OF THE PROPOSAL: Restrict all motor vehicle use for big game hunting during August 1–September 30 in the McCumber and Jarvis Creek drainages in southwestern Unit 20D.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between hunters that use different means of transportation, and should be determined by the Board. This proposal seeks to address wildlife habitat degradation and the deterioration of hunt quality in this area.

The area is within the boundaries of the Delta Controlled Use Area (DCUA). The DCUA is closed to any motorized vehicle or pack animal use for big game hunting, including the transportation of the hunters, their gear, and parts of big game during August 5–25. The proposed restriction of motor vehicle use for big game hunting in the McCumber and Jarvis Creek drainages would add complexity to the hunting regulations in this portion of Unit 20D because the restriction would go into effect earlier and be in effect longer than the surrounding DCUA transportation restrictions, but would not include prohibition on use of pack animals. There would also be a slight decrease in the amount of area accessible to motorized vehicles for sheep, caribou, and moose hunters during August 26–September 30.

PROPOSAL 204

EFFECT OF THE PROPOSAL: Increase the Intensive Management population objective for moose in Unit 20A.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: The Department recommends that the Intensive Management (IM) population objective for Unit 20A be increased from 10,000–12000 to 12,000–15,000 as proposed.

The Unit 20A moose population was reduced from an estimated 17, 766 (15,489–20,044; 90% Confidence Interval [CI]) in 2003 to 12, 536 (11,102–13,969; 90% CI) in 2008. At that lower population level, we detected no improvement in the nutritional status of the population. The Department reduced female harvest rates beginning in 2008 in an attempt to stabilize the population at about 13,000–14,000 moose, while continuing to monitor nutritional status. Estimates in 2009 of 15,676 (13,771–17581; 90% CI), 2010 of 14,497 (12,545–16,448; 90% CI) and in 2011 of 12,724 (11,197–14,250; 90% CI) indicate moose numbers have remained relatively stable, and no further declines in moose productivity have been detected. If nutritional status begins to decline, it may be prudent to further reduce moose numbers until either improvement in nutritional status is observed or the lower end of the proposed population objective (12,000 moose) is reached.

PROPOSAL 205

EFFECT OF THE PROPOSAL: Change the legal animal in antlerless hunts in Units 20A and 20B

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: The department supports this proposal where liberal antlerless harvests are being conducted to meet Intensive Management (IM) objectives. Including a high proportion of calves in the harvest is an integral component of managing for elevated yield as mandated in Intensive Management legislation. To achieve the IM harvest objectives of moose in Unit 20A, it is essential that calves are included in the harvest. Increasing the proportion of calves in antlerless hunts increases sustained yield because a portion of that harvest is compensatory.

According to the Alaska Wildlife Troopers, the current prohibition on the take of calves is unenforceable as there is overlap in the size of calf and yearling moose. Also, many hunters cannot differentiate between calves and yearlings and cannot reliably identify calves, especially when calves are separated from adult animals by sufficient distance that size comparisons cannot be made. Furthermore, prohibiting the take of calves in antlerless hunts creates regulatory inconsistencies and confusion. For example, in most portions of Unit 20B, it is illegal to take a calf in an antlerless hunt, but legal to take a male calf in the general hunt.

Retaining the prohibition on the take of cows accompanied by calves addresses the issue of orphaned calves, but would allow the take of cow/calf pairs by 2 hunters as long as the calf is taken first.

The primary argument against the take of calves and cow accompanied by calves is one of ethics or human values, opinions that the department respects, but takes no position.

PROPOSAL 206

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose hunting season in Unit 20A.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal — see issue statement.

PROPOSAL 207

EFFECT OF THE PROPOSAL: Modify the muzzleloader hunt area for moose in Unit 20A (i.e., revert to the original hunt area).

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The department has no biological concerns. This is an allocation and user conflict issue that should be decided by the Board. This late season muzzleloader hunt (DM766; 1–30 November) was located in the eastern Wood River Controlled Use Area during 1996–1999 and 2005–2010. The hunt was suspended during 2000–2004 because of declining bull:cow ratios.

In 2010, citing conflicts between hunters, trappers (i.e., primarily a single wolf trapper in the area), and local residents as well as disturbance to moose, a public proposal was submitted to the Board to move the hunt from Unit 20A to Unit 20B. Instead, the Board established a new late season muzzleloader hunt in Unit 20B and expanded the Unit 20A muzzleloader hunt to include all portions of Unit 20A outside of the “original” hunt area beginning in fall 2011. The intent was to hold the hunt in a portion of this area, at the discretion of the Department.

The Unit 20A muzzleloader hunt was moved east in 2011 to include upper Dry Creek, the Little Delta River and western portions of Delta Creek. The Department received numerous complaints from drawing permit winners regarding this move. Most complaints cited access issues (i.e., difficulty crossing the Tanana and Wood rivers because they would not be frozen). In October 2011, the Department responded to those complaints and expanded the hunt area to include portions of the Tanana Flats with better access during that time of year.

On average, approximately 15 bull moose are taken each year in this relatively small-scale (40-75 permits), special weapons hunt. Although the proposer suggests that this hunt is a useful management tool to regulate the moose population, any reduction in harvest during the muzzleloader hunt can be reallocated by issuing additional “any bull” permits for that area during fall. Hence, this is clearly an allocation issue that should be decided by the Board.

PROPOSAL 208

EFFECT OF THE PROPOSAL: Establish a new muzzleloader drawing permit hunt for any moose in the remainder of Unit 20A, outside the Wood River Controlled Use Area.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the board, and therefore, the Department has no recommendation. A muzzleloader hunt began for bull moose in Unit 20A in 1996 and recently has become very controversial. If this proposal is adopted, the Department requests that the Board specify hunt location, season, and bag limit. The additional harvest generated by adding a new muzzleloader hunt for antlerless moose would be small and is not needed to regulate the Unit 20A moose population.

Currently, there is ample opportunity to hunt antlerless moose with muzzleloader during the winter antlerless registration hunt and the Department does not anticipate significant reductions in opportunity to hunt antlerless moose by any legal means, including muzzleloaders, during late season registration hunts. Portions of the Unit 20A antlerless registration moose hunt (i.e., zones 4B and 5) have been open during 10 January–28 February. Portions of Zone 2 have been open for the month of January and zones 3A and 4A have opened for 2 days at the end of February. At the 2010 Board meeting, the Department was given the authority to open late season antlerless moose hunts as early as 1 October and in 2011 the antlerless registration hunt opened on 15 November.

PROPOSAL 209

EFFECT OF THE PROPOSAL: Require hunters in “any bull” moose hunts in Unit 20A to attach a locking tag at the kill site and keep the antlers visible during transport from the field.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The Department recommends “take no action” on this proposal based on action taken by the Board on proposal 52 at the January 2012 statewide meeting. The board approved Department discretionary permit authority requiring a permittee to attach a locking tag to an antler at the kill site. However, they did not approve requiring a permittee to keep antlers visible during transport from the field.

PROPOSAL 210

EFFECT OF THE PROPOSAL: Move the northern boundary of the Wood River Controlled Use Area.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation and user conflict issue among hunters using different modes of transportation and should therefore be determined by the board.

The Wood River Controlled Use Area (WRCUA) encompasses 972 mi² in southcentral Unit 20A. It was established in 1976 to include the Yanert drainage to the south and the Tanana Flats to the north. Its purpose was to reduce conflicts between ATV users and airplane and horse users. Boats and aircraft were the only motorized access allowed for hunting. In 1977 the Tanana Flats portion was removed. In 1983 the Yanert drainage was removed and made into the Yanert Controlled Use Area with year-round restrictions on use of motorized vehicles for big game hunters, except aircraft. The same year, the WRCUA's current boundaries were adopted (with the exceptions that the boundary along the Wood River downstream from Snow Mountain Gulch was clarified in 2000 and the western boundary was changed and changed back again in the early 2000s). Also in 1983, motorized vehicles, except aircraft, were restricted from use for the purpose of hunting big game during Aug. 1-Sept. 30.

Most hunters currently access the area via aircraft and horse. Since its inception, the WRCUA has had substantial use by guides accessing the area by aircraft and horseback for moose, sheep, caribou, and grizzly bear. A portion of the area covered under this proposal was open to motorized access in the early 2000s after the Board passed a proposal by the Middle Nenana Fish and Game Advisory Committee. Within 2 years, that same committee proposed that vehicle restriction be reinstated in that area and the board accommodated their request.

If this proposal is adopted, we would expect to see substantial increases in use of the area and in user conflicts, and modest increases in harvests. Sheep horn restrictions and caribou drawing permits already in place would prevent overharvest of those species.

Regarding moose, antler restrictions already in place would prevent overharvest of bull moose. Opening the area to motorized access in September would likely increase the harvest of antlerless moose and help meet harvest objectives for that area (Zone 4). However, during September, antlerless hunts in this area are by drawing permit only, thus, increases in antlerless harvest would likely be modest.

PROPOSAL 211

EFFECT OF THE PROPOSAL: Prohibit all-terrain vehicle use in a portion of Unit 20A.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between hunters that use different modes of transportation, and should therefore be determined by the board. Current regulations are adequate to manage big game harvests in this portion of Unit 20A.

This proposal seeks to prohibit all-terrain vehicle use above 2,500 feet in elevation in that portion of Unit 20A between the west bank of Delta Creek and the east bank of the East fork of the Little Delta River up to and including the east bank of West Hayes Creek. The aim is to curtail habitat destruction, environmental degradation, deterioration of quality hunting experience, game and hunter harassment, unsportsmanlike conduct and unsightliness of trails. Destruction of habitat

and environmental degradation are land management issues under authority of the State of Alaska Department of Natural Resources. Elevation was used to define antlerless hunt boundaries in the Delta Area several years ago and the Alaska Wildlife Troopers found it to be problematic, unreliable and difficult to enforce.

PROPOSAL 212

EFFECT OF THE PROPOSAL: Restrict all-terrain vehicle use to one type in a portion of Unit 20A.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between hunters that use different modes of transportation, and should therefore be determined by the board. Current regulations are adequate to manage big game harvests in this portion of Unit 20A.

This proposal seeks to limit all-terrain vehicle use to one type south of the 64th parallel in that portion of Unit 20A that includes the drainages between the east bank of Delta Creek and the west bank of the East Fork of the Little Delta River up to and including the west bank of West Hayes Creek. The aim is to curtail destruction of habitat, environmental degradation, deterioration of quality hunting experience, game and hunter harassment, unsportsmanlike conduct and unsightliness of trails. Destruction of habitat and environmental degradation are land management issues under authority of the State of Alaska Department of Natural Resources. Should this proposal be adopted, the Alaska Wildlife Troopers recommend that the line of latitude be identified by two defined points, one on the east and one on the west.

PROPOSAL 213

EFFECT OF THE PROPOSAL: Allow motorized vehicle access in the Yanert Controlled Use Area in Unit 20A during October through July.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between hunters that use different modes of transportation, and should therefore be determined by the board. If the Board adopts this proposal, it could help achieve Intensive Management (IM) population and harvest objectives for moose in Unit 20A. The department is striving to harvest more moose in Unit 20A to regulate the population and to meet IM harvest objectives. In addition, the department's strategy is to spread the harvest spatially and temporally to reduce localized overharvest and social conflicts (e.g., trespass, parking and roadside camping issues, garbage and human waste issues, access issues, and hunter crowding). Allowing motorized access in the Yanert Controlled Use Area (YCUA) after 1 October would help accomplish this by providing a place for the November muzzleloader

hunt (annual harvest of ~15 bull moose) and additional harvest (~10–15 antlerless moose) during the winter registration hunt.

PROPOSAL 214

EFFECT OF THE PROPOSAL: Create an "any ram" drawing permit hunt in Unit 20A for up to 10 tags; August 17–September 20.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The Unit 20A management objectives for sheep include providing the greatest sustainable annual opportunity to hunt and harvest Dall sheep. The full-curl harvest strategy has been effective in achieving these objectives. The proponent’s intention is to harvest mature rams that have not reached full curl and never will. The department has very little data for this area regarding the proportion of 8-year-old or older rams that do not reach full curl, but that number is probably low and is certainly lower than that of 7-year-old and younger rams. Thus, it is more likely that rams harvested under this permit would be young rams as opposed to less than full curl mature rams. The harvest of younger rams would be primarily additive mortality, which would reduce the availability of full-curl rams in the future and ultimately reduce sustainable opportunity to hunt and harvest full curl rams in the area.

PROPOSAL 215

EFFECT OF THE PROPOSAL: Establish a community subsistence harvest moose hunt area for the village of Minto in the Unit 20B Minto Flats Management Area.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 216.

PROPOSAL 216

EFFECT OF THE PROPOSAL: Open the antler-restricted bull hunt 10 days earlier in the Minto Flats Management Area; convert the winter any-moose registration permit hunt to antlerless; and issue an unlimited number of permits.

DEPARTMENT RECOMMENDATION: **Amend And Adopt**

RATIONALE: The Department recommends amending this proposal to implement a different approach to resident moose harvest in Minto Flats Management Area (MFMA) from what is currently in place. This high density moose population can support a harvest regime different than the current short, antler-restricted bull season and the limited registration permits for any moose (see details in the following table). The limited registration permits that have been issued

since 2006 have created dissatisfaction among local and nonlocal hunters because of the limited number of permits and, at times, long waiting periods in outdoor lines under extreme weather conditions.

The MFMA moose population is estimated at over 4000 moose (2010; 4.4 moose/mi²) and is likely stable or increasing. Sustainable harvest (5%-7%) is estimated at 200-280 moose. Reported harvest during regulatory year 2010 was 195 moose (129 bulls and 66 cows). The board has found that there are positive customary and traditional uses of moose in Unit 20, and has found the amount reasonably necessary for subsistence (ANS) for the Minto Flats Management Area is 20-40.

Proposal 216 would retain the September antler-restricted hunt for bulls; delete the September, any moose, limited registration permit hunt; and modify the winter, any moose, limited registration hunt to an antlerless moose, unlimited registration hunt that starts on November 1. The Department's amendment to proposal 216 would establish a new, any bull season in August; retain the September, antler-restricted season; delete the September, any moose, limited registration permit hunt, and modify the winter, any moose, limited registration hunt to an antlerless moose, unlimited registration hunt that starts on October 15. This season would be closed by emergency order when the desired number of antlerless moose is taken. All moose hunts would continue to be for resident hunters only.

	Current Regulation	Proposal 216	Department Amendment
Bag Limit			1 bull
Season			Aug. 21–27
Bag Limit	1bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on one side	1bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on one side	1bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on one side
Season	Sept. 11–Sept. 25	Sept 1–Sept. 25	Sept 8–Sept. 25
Bag Limit	1 moose by registration permit only (limited number of permits, 1 permit per household)		
Season	Sept. 1–Sept. 25		
Bag Limit	1 moose by registration permit only(limited number of permits, 1 permit per household)	1 antlerless moose by registration permit only (unlimited number of permits, 1 permit per household)	1 antlerless moose by registration permit only (unlimited number of permits, 1 permit per household)
Season	Jan. 1–Feb. 28	Nov. 1–Feb. 28	Oct. 15–Feb. 28

Under the Department's amendment, the August 21–27 any-bull general season and September 8–25 antler-restricted general season would increase the fall general season from 15 to 25 days.

It would allow for a liberal bag limit during the early season when hunting conditions are more difficult; however, antler restrictions would be in place when moose start entering the breeding season and become more susceptible to harvest. This general season for bulls would be more restrictive than the current fall registration permit, but every resident could participate without having to stand in line for a permit. This new fall general season would be closed August 28–September 7 in order to limit harvest when Minto Flats has an influx of waterfowl hunters who may incidentally take moose.

The October 15–February 28 antlerless moose registration permit could accomplish several things. First, the registration permits will be unlimited so that people would not need to stand in line to obtain a permit. However, the hunt would be closed by emergency order when the antlerless harvest quota is met. Second, this hunt would continue to provide opportunity for residents to harvest antlerless moose in the MFMA during winter. Third, the harvest quota will likely not be met in an unreasonably short period of time because access will be limited in the area when the hunt starts on October 15. Fourth, access will improve and harvest will increase as the season progresses and snow and ice conditions improve. Finally, this antlerless season would help achieve the Department’s goal of harvesting sufficient cow moose to limit growth of this high density moose population. This hunt would be more restrictive than the current winter season because it would be limited to antlerless moose and bulls would still be carrying antlers in October and November.

PROPOSAL 217

EFFECT OF THE PROPOSAL: Establish a community subsistence harvest hunt area for the Village of Minto in Unit 20.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: This proposal was deferred from the spring 2011 meeting. See analysis and recommendation for proposal 216.

PROPOSAL 218

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose hunting season in Unit 20B.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal — see issue statement.

PROPOSAL 219

EFFECT OF THE PROPOSAL: Remove part B of 5AAC 92.530(8), the limitation to airboats and aircraft for moose hunting in the Minto Flats Management Area.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the board, and therefore, the Department has no recommendation. The Minto Flats Management Area (MFMA) was established in 1979 in response to concerns about increasing hunting pressure, competition between users, and declining moose populations. It is an area with a positive customary and traditional use finding currently with a high density of moose and large number of users. It is unclear to what extent the access restrictions were intended to provide reasonable opportunities for subsistence.

Currently, MFMA is open to moose hunting, except that aircraft and airboats may not be used for moose hunting or to transport moose, moose hunters, or moose hunting equipment within the area. Removing the prohibition on airboats and aircraft would not create a biological concern at this time because moose numbers are high (>4000 moose; > 4 moose/mi²) and the harvest can be regulated by seasons and bag limits (e.g., early seasons, antler restrictions, quotas). The Department anticipates that user conflicts between hunters who use aircraft and airboats and other hunters would arise if this proposal is adopted. Also, allowing the use of aircraft and airboats may shift a significant proportion of the harvest to this more efficient mode of transportation compared to the use of powerboats.

The proposal states that this change would help control the growing, high density moose population in MFMA. Harvest objectives determined by the department are easily attainable with the current regulations.

PROPOSAL 220

EFFECT OF THE PROPOSAL: Lengthen the muzzleloader drawing permit season for antlerless moose in Unit 20B, Creamer's Refuge, and expand the hunt to all of the Fairbanks Management Area.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This proposal is an allocation issue that should be decided by the board, and therefore, the Department has no recommendation. Significant social issues that may arise are included below.

The department uses several hunts within the urban Fairbanks Management Area (FMA), which includes Creamer's Refuge, as tools to reduce roadkill, reduce nuisance moose problems, and increase hunting opportunity. Public acceptance of moose hunting in this urban area is critical to the future of the hunts. In addition to a 7-day muzzleloading season on Creamer's Refuge, a drawing archery hunt for antlerless moose and a general season archery hunt for bull moose occur within the FMA. Most of the moose taken in this urban area are taken by archery and roadkill.

Expanding the muzzleloader hunt into the FMA or lengthening the muzzleloading hunt may not be acceptable to surrounding home and business owners or the recreating public. Creamer's Refuge is completely surrounded by Fairbanks residential and business areas and is used by thousands of non-hunting outdoor recreationists every year. Archery has proven to be a publicly acceptable method of moose take within the FMA for the last 20 years, while the local public has frequently requested that large caliber firearms not be used to take large animals around their homes and businesses.

Opportunity for muzzleloading hunters to harvest moose between August 15 and February 28 in the rest of Unit 20 is at an all-time historical high. In addition, muzzleloading rifles can be used during any hunt in which rifles are allowed.

An alternative to this proposal may be to amend the hunt dates to December 1–January 31. This would separate archers from muzzleloaders, provide a much longer season, put muzzleloading hunters in the field during the time of year when Creamer's Refuge has the least number of other users, and focus the harvest during the period of the highest road kill rate.

PROPOSAL 221

EFFECT OF THE PROPOSAL: Lengthen the muzzleloader season in the Creamer's Field Migratory Waterfowl Refuge in Unit 20B.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 220.

PROPOSAL 222

EFFECT OF THE PROPOSAL: Modify the muzzleloader drawing permit hunt area (DM782) to prohibit harvest of antlerless moose in the Salcha River drainage.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the Board, and therefore, the Department has no recommendation.

The moose population in all of Unit 20B is estimated at 20,173 moose. Eastern Unit 20B encompasses 2,425 mi², and has an estimated population of 3,574 moose (1.5 moose/mi²). Although the moose density in eastern 20B is lower than other portions of Unit 20B, a conservative antlerless harvest of up to 1% of the population (35 antlerless moose) is sustainable.

The DM782 hunt includes a small part of eastern Unit 20B: the Salcha River upstream of Goose Creek and the Middle Fork of the Chena River. Sixty permits are issued, and access is difficult during the hunt period, particularly in the Salcha River drainage. During the first year of this hunt in 2011, one cow moose was taken in this hunt on the Middle Fork of Chena River. Because

snow and ice conditions are usually poor in November, we expect that harvest will continue to be low.

PROPOSAL 223

EFFECT OF THE PROPOSAL: Modify the antlerless muzzleloader moose season in Unit 20B by excluding the antlerless component for the Salcha River.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 222.

PROPOSAL 224

EFFECT OF THE PROPOSAL: Review the boundary of the Fairbanks Management Area; focus on changing the boundary near Murphy Dome and Ester Dome.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no biological concerns with this proposal. The Fairbanks Management Area (FMA) has been in place since the 1970s, when it was called the Fairbanks Closed Area, and was closed to moose hunting. In the 1980s it changed to the Fairbanks Management Area, and an archery moose season was opened. The FMA’s main purpose is to facilitate moose management in the densely populated areas in and around Fairbanks. The boundaries have changed numerous times over the years mainly to encompass new housing developments and subdivisions. The current boundaries have been in place for many years and the public is familiar with them. The Department has maintained 37 days of general archery season for bull moose along with a drawing permit hunt for antlerless moose for many years.

We try to maintain a high harvest of moose to reduce moose–motor vehicle accidents in the FMA. The large, relatively undeveloped areas near Murphy and Ester domes referred to in the proposal are small relative to moose home range size and movements. Thus, moose likely move in and out of these areas, making them available for harvest both inside and outside the FMA during the long moose seasons.

PROPOSAL 225

EFFECT OF THE PROPOSAL: Remove the aircraft restrictions for beaver trapping in the Minto Flats Management Area.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue between trappers that use airplanes for access and those who do not. The Department has no concerns about the sustainability of beaver harvested in the Minto Flats Management Area. Although we have not conducted beaver surveys, Minto Flats is prime beaver habitat and anecdotal information and recent harvest levels documented through household surveys suggest that beaver populations are healthy.

Beaver trapping regulations have been liberalized in recent years across Region III. Seasons were lengthened to start in September and end later in the spring and bag limits were removed. While beaver fur prices have been low for many years, resulting in minimal trapping effort in Interior Alaska, beaver remains a highly significant food source for many Alaskan residents, particularly Alaska Native communities. The Department documented a harvest of 227 beaver by Nenana residents in 1982 and a harvest of 147 beaver by Minto residents in 1984. More recently, we documented a reported harvest of 132 beaver by Minto and Nenana residents combined in 2004–2005.

The Board established a positive customary and tradition (C&T) use finding for beaver in all units with a harvestable surplus in March 2000. At that time, the Board determined that the harvestable portion was the amount reasonably necessary for subsistence (ANS) [5 AAC 99.025 (a)(13)(A)]. That determination was revised in January to 90% of the allowable harvest for all units statewide.

The current regulation prohibiting aircraft for beaver trapping in Minto Flats has been in place for 30 years and was likely put in place because of trapper conflict as a result of high fur prices at the time and the importance of protecting C&T use patterns of beaver use by residents of Minto and Nenana, as recognized in the positive C&T use determination. Although this regulation allows use of aircraft after March 1, the department is not aware of specific conflicts between aircraft and non-aircraft trappers. However, conflicts over trespass on corporation land and between MFMA trappers and other stakeholders continue. A high proportion of the beaver colonies in Minto Flats are on either small ponds, sloughs or one of the many narrow winding rivers that are inaccessible to aircraft.

PROPOSAL 226

EFFECT OF THE PROPOSAL: Align the resident and nonresident moose seasons in Unit 20C.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be determined by the board, and therefore, the Department has no recommendation. Fall 2011 surveys indicated that Unit 20C has a population of about 3,141 moose outside Denali National Park and Preserve, with a harvestable surplus of 190 bulls. The bull:cow ratio was 50 bulls:100 cows and the calf:cow ratio was 41 calves:100 cows. The average annual reported harvest during regulatory years 2006–2007 through 2010–2012 was 132 moose, and the average annual nonresident harvest was 13 moose. An average of 35 nonresidents hunted moose annually during this time period.

The current resident season for moose in Unit 20C is September 1–20 and the nonresident season is September 1–15, with a bag limit of 1 bull for both residents and nonresidents. If adopted, this proposal would provide the same opportunity for nonresidents as for residents. The board will need to evaluate whether adoption of this proposal would be consistent with the subsistence priority law. Unit 20C is an area with a positive customary and traditional use finding and an amount reasonably necessary for subsistence uses (ANS) of 100–130 for 20C and 20F combined. The harvestable surplus of 190 bulls exceeds the ANS and is well above the average reported harvest.

PROPOSAL 227

EFFECT OF THE PROPOSAL: Unit 20C will be managed as an intensive management area.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 229.

PROPOSAL 228

EFFECT OF THE PROPOSAL: Adopt a wolf control program for Unit 20C.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 229.

PROPOSAL 229

EFFECT OF THE PROPOSAL: Adopt an intensive management plan for Unit 20C moose that will identify and quantify the issues restricting moose population growth and plan for actions to enhance that growth.

DEPARTMENT RECOMMENDATION: **Defer**

RATIONALE: The Department will present the Board with an intensive management (IM) feasibility assessment to help guide a decision concerning development of an IM plan for Unit 20C. If the Board decides to proceed with a planning process, the Department recommends deferring final action on this proposal until the regularly scheduled Jan. 2013 Board meeting. At that time, we would present a 5AAC 92.125 IM plan, accompanied by a Department operational plan, for Board consideration.

The Department completed a moose population estimate in Unit 20C during November 2011. An estimated 3,801 moose inhabit Unit 20C outside Denali National Park and Preserve with ratios of 49 bulls and 42 calves per 100 cows. The 2006–2010 average fall harvest was 132

bulls. The current IM population objective is 3,000–4,000 moose, and the IM harvest objective is 150–400 moose.

PROPOSAL 230

EFFECT OF THE PROPOSAL: In Unit 20C, establish a bear population reduction program.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 229.

PROPOSAL 231

EFFECT OF THE PROPOSAL: Allow trapping for black bear in Unit 20C in the Teklanika River and Kantishna river drainages.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 229.

PROPOSAL 232

EFFECT OF THE PROPOSAL: Allow the harvest of brown bears at black bear bait stations in Unit 20C. The hide and meat must be salvaged.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The Department has no biological concerns regarding this proposal. Allowing the harvest of brown bears over black bear bait could reallocate some moose in the more accessible areas of Unit 20C from bears to hunters. Currently, an average of 6 brown bears is harvested annually in the unit. It is likely that a higher harvest is sustainable.

The portion of Unit 20C that is accessible for bear hunting is mostly flat, densely wooded habitat where hunting is difficult. The use of bait is the most effective hunting method and most of the current harvest is black bears taken in this way. Access to the area is mainly by boat, ATV, and aircraft, although a large portion of 20C is inaccessible.

The Board has not yet determined whether there are customary and traditional uses (C&T) of brown bears in Unit 20C pursuant to AS 16.05.258. As a result, the Department will provide a C&T worksheet based upon the 8 criteria found in 5 AAC 99.010 for the Board’s consideration prior to taking action on this proposal.

If this proposal is adopted, the Department recommends that brown bears be added to 5 AAC 92.044 (Permit for hunting black bear with the use of bait or scent lures) to allow us to use our discretionary permit authority to closely monitor the harvest so the season can be closed by emergency order if necessary.

PROPOSAL 233

EFFECT OF THE PROPOSAL: Establish the Denali Controlled Use Area to include state land within certain townships and sections in Unit 20C.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue that should be decided by the Board. Controlled use areas function primarily to address conflicts between groups that use different modes of transportation for hunting. For example, the purpose of the Wood River CUA in Unit 20A is to reduce conflicts between ATV users and airplane and horse users for big game hunting. This proposal does not identify user conflicts that need to be addressed nor does it make recommendations regarding potential solutions. Also, it is not clear which species (e.g., caribou, moose, black bear, grizzly bear, wolves, wolverine, etc.), if any, are being impacted. Additional information is needed to adequately evaluate this proposal.

PROPOSAL 234

EFFECT OF THE PROPOSAL: Require meat-on-the-bone salvage of moose in Unit 25C.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is not a biological issue, and therefore, needs to be determined by the Board.

The Department is not aware of any meat salvage issues in Unit 25C. We also do not have any quantifiable data concerning wanton waste in Unit 25C and the Alaska Wildlife Troopers do not issue excessive wanton waste citations compared to other Interior units.

Leaving the edible meat attached to the bone is commonly practiced by hunters. However, many hunters remove the meat from the bone at kill sites or camps to facilitate packing or transport. Meat can be successfully salvaged for human consumption when proper procedures are followed during de-boning. Requiring meat to be left on the bone until processed for human consumption does not ensure adequate preservation. Many factors, including weather, cleanliness during field care and transport, and the use of game bags affect the condition of meat when it arrives at the point of processing.

Hunter transportation methods in Unit 25C vary widely, including boats, aircraft, highway vehicles, and ATVs. Since 2000, 48% of successful moose hunters used 3- or 4-wheelers, 24%

used boats, 18% used highway vehicles, 4% used aircraft, and 6% used other means, including off road vehicles, or horses.

PROPOSAL 235

EFFECT OF THE PROPOSAL: Increase the bag limit for black bear in Unit 25C from 3 to 5.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: The Department recommends adopting this proposal because increasing the bag limit will allow additional hunting opportunity with little or no effect on the black bear population.

Black bear densities and population size are unknown in Unit 25C. However, based on estimated densities in Unit 19D (15–30 black bears/100 mi²) and Unit 20A (12–18 black bears/100 mi²), the Unit 25C population estimate is likely 618–1,545 black bears. Therefore, we estimate the harvestable surplus is 61–233 black bears.

Sealing and/or harvest tickets are not required in Unit 25C. However, we estimate an annual take of approximately 15–30 bears, based on extrapolation of reported and estimated harvest from other Interior units. An average of 12 bait stations a year is registered. Harvest is not likely to increase significantly because of the distance from the Fairbanks urban area and relatively few roads. In addition, few hunters will likely take 5 bears annually. In adjacent Unit 20B, annual harvest was 133 bears, and an average of 1 hunter per year took the bag limit of 3 bears

PROPOSAL 236

EFFECT OF THE PROPOSAL: Allow limited harvest of brown bears at black bear bait stations in Units 20A, 20B and 25C.

DEPARTMENT RECOMMENDATION: **Units 20A and 20B–Do Not Adopt; Unit 25C–No Recommendation**

RATIONALE: The department estimates 120–161 independent (older than 2nd year of life) brown bears in Unit 20A, a sustainable harvest of 10–13 bears (8%), and a mean reported harvest of 23 bears (2008–2010). For Unit 20B, we estimate 57–127 independent brown bears, a maximum sustainable harvest of 4–10 bears (8%), and a mean reported harvest of 14 bears (2008–2010). Because harvests may have been exceeding estimated sustainable take in Units 20A and 20B and allowing brown bears to be taken over black bear bait stations would likely result in higher harvests, the department does not recommend allowing baiting of brown bears in these Units. The current harvest is being closely monitored and more conservative seasons may be necessary.

We have no recommendation for Unit 25C where additional harvest could likely be sustainable (i.e., the department estimates 66–133 independent brown bears in Unit 25C, a maximum sustainable harvest of 5–10 bears (8%), and a mean reported harvest of 6 bears (2008–2010).

The Joint Boards of Fisheries and Game has adopted a Fairbanks nonsubsistence area (FNSA) that includes portions of the units addressed by this proposal. The Board has previously determined that there are no customary and traditional uses (C&T) of brown bears in Units 25C and 20B outside the FNSA. The Board has not yet made this determination in Unit 20A outside the FNSA pursuant to AS 16.05.258. As a result, the Department will provide a C&T worksheet based upon the 8 criteria found in 5 AAC 99.010 for the Board’s consideration prior to taking action on this proposal.

The proponent recommends that the bag limit be restricted to 1 brown bear every four years. However, if this proposal is adopted, the Department recommends a 1 brown bear every regulatory year bag limit (i.e., the same as the general season bag limit in these units). We also recommend that brown bears be added to 5 AAC 92.044(Permit for hunting black bear with the use of bait or scent lures) to allow us to use our discretionary permit authority to closely monitor the harvest so the season can be closed by emergency order if necessary.

PROPOSAL 237

EFFECT OF THE PROPOSAL: Align the brown bear season in all of Unit 20 to August 10–June 30.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The grizzly bear seasons in Units 20C, 20D, 20F, and 20E are currently August 10–June 30 and September 1–May 31 in Units 20A and 20B. The Department recommends amending this proposal to change the grizzly bear season in eastern Unit 20B (i.e., the Middle Fork of the Chena River and upper Salcha River drainages in Unit 20B) to August 10–June 30, because this area has poor access and low hunter densities, minimizing the risk of overharvest. However, the Department does not support the longer season proposed for the remainder of Unit 20B and for Unit 20A because these areas have better access and higher hunter densities, increasing the risk of overharvest with a longer season. Reported brown bear harvests during regulatory years 2008–2009 through 2010–2011 in Units 20A (average =23) and 20B (average =14) have been increasing and exceeding estimated sustainable harvest rates of 8% (i.e., 13 of the estimated population of 160 bears in Unit 20A; 9 of the estimated population of 110 bears in Unit 20B). Although harvest rates have been based on dated population estimates and models, which may no longer be applicable, a conservative strategy should continue to be used in these areas.

PROPOSAL 238

EFFECT OF THE PROPOSAL: Implement a predation management plan in Unit 9B.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: During the March 2011 meeting of the Board of Game in Wasilla, the board adopted a proposal to develop a predator control plan for moose in Unit 9B. The department developed the required regulatory language (5AAC 92.125) and is in the process of conducting a feasibility assessment.

The department recommends the board not adopt Proposal 238 at this time due to the low likelihood of making progress towards objectives given the information collected to date. Significantly more information is required to document the triggers necessary for intensive management, to develop a feasible IM plan, and to determine whether suitable methods for monitoring and evaluating the plan can be implemented.

PROPOSAL 239

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 1C, Berners Bay.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, See issue statement.

The Juneau-Douglas Advisory Committee voted unanimously in support of reauthorizing the antlerless hunt. However, the department will not be opening the antlerless hunt in this area until such time the herd demonstrates significant growth, and staff believes it is necessary to control the overall number of moose due to habitat limitations. Additionally, no bull permits have been issued for this herd for fall 2012, nor have any been made available since 2006.

An aerial survey conducted in November 2011 recorded 73 moose total (22 bulls; 41 cows; and 10 calves). Using sightability estimates based on radio-marked cow moose, we estimate the Berners Bay moose population to be approximately 108 moose. In 2010 the overall population estimate was 88 moose. At best, we believe the population remained stable, or increased slightly in 2011. Both the bull:cow (54:100) and calf:cow (24:100) ratios increased slightly from 2010 (40:100 and 22:100, respectively). In the coming months, staff will discuss the merits and options for providing a drawing bull moose hunt in Berners Bay in fall 2013. Annual aerial surveys will be conducted annually in Berners Bay to monitor the moose herds' status. Additionally, we will continue to maintain a collared sample of cow moose in this herd to monitor adult survival, calf survival, and fecundity.

PROPOSAL 240

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 1C, Gustavus.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, See issue statement.

The Gustavus portion of the Icy Straits Advisory Committee voted 4-1 (1 member absent) to support reauthorizing the antlerless hunts; the Juneau-Douglas Advisory Committee voted unanimously in support of the reauthorization. However, the department will not be opening the antlerless hunt at Gustavus until such time the herd demonstrates significant growth, and staff believes it is necessary to control the overall number of moose due to habitat limitations.

An aerial survey conducted in November 2011 recorded 136 total moose (16 bulls, 94 cows, and 26 calves). Using sightability estimates based on radio-marked cow moose, we estimate the Gustavus moose population to be approximately 272 moose. In 2010, the overall population estimate was 252 moose. The Gustavus moose population appears to be stable and within the desired population level for the available habitat and reducing the overall number of moose is not necessary at this time. Annual aerial surveys will be conducted annually in Gustavus to monitor the moose herds' status. Additionally, we will continue to maintain a collared sample of cow moose in this herd to monitor adult survival, calf survival, and fecundity.

PROPOSAL 241

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 5A, Nunatak Bench.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

The Yakutat Advisory Committee voted 10-1 to support the antlerless hunt reauthorization. However, the department will not be opening the antlerless hunt at Nunatak Bench until such time the herd demonstrates significant growth, and staff believes it is necessary to control the overall number of moose due to habitat limitations. No permits were issued for fall 2012, nor have any been available since 2004. Aerial surveys of the area were not completed in 2010, and have not yet been completed in 2011.

PROPOSAL 242

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 6A.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal; see issue statement.

PROPOSAL 243

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 6B.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal; see issue statement.

PROPOSAL 244

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 6C.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal; see issue statement.

PROPOSAL 245

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 13.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal; see issue statement.

PROPOSAL 246

EFFECT OF THE PROPOSAL: Antlerless moose hunt reauthorization for GMU 14A

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: Antlerless moose hunts must be re-authorized annually by the Board. During November 2011, the moose population in Unit 14(A) was surveyed and estimated at 7,467 which was more than the post-hunt objective of 6,000 – 6,500 moose and an increase from the November 2008 survey of 6,613. The bull:cow ratio was 18.6 bulls:100 cows in 2011, which is lower than the ratio of 24.7 bulls:100 cows observed in 2009 and below objectives. The calf:cow ratio observed in 2011 (39.9 calves:100 cows) also declined when compared with the calf ratio observed in 2009 (48.9 calves:100 cows). Snow depth accumulations in the subunit during the last 4 winters were average, and survival of calves and adults was likely good.

Given the increase in the population, models indicate an increase in the cow harvest is needed to prevent further increases in the population. The department is already issuing the maximum number of drawing permits authorized by this regulation (up to 500 permits may be issued currently). At the same time the decrease in the bull to cow ratio indicates that taking additional bulls during the winter antlerless hunt would exacerbate the decline in the bull to cow ratio. As a result, we propose adjusting the season dates for the winter drawing hunt to correspond with a

period of time when bulls will still have their antlers. Adjusting the season will result in fewer bulls being taken in this hunt and will help improve the bull:cow ratio.

In March of 2011 the Board authorized a new ‘hot spot’ permit hunt that allows permitted hunters to take moose that are in conflict with humans during winter months when moose congregate near roads or create other nuisance issues. Because this hunt occurs in the winter when moose are antlerless, the “hot spot” hunt must also be reauthorized annually by the Board. The department would like to retain this hunt along with its current season dates, so it can continue to be used as a tool to address moose problems during the winter.

The department will be submitting an RC with new proposed season dates for the drawing permit hunt, changing the season from Jan. 1 – Feb. 25 to Nov. 1 – Dec. 25, and increasing the number of draw permits that the department can issue from 500 to 1000. The RC will also include regulations for the winter “hot spot” hunt that were not included in the original proposal.

PROPOSAL 247

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in the Twentymile/Portage/Placer hunt areas in Units 7 and 14(C).

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 248

EFFECT OF THE PROPOSAL: Reauthorize existing antlerless hunt for Unit 14C, Joint Base Elmendorf-Richardson (JBER).

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 249

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in the Anchorage Management Area in Unit 14(C).

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement

PROPOSAL 250

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in the Birchwood Management Area and the remainder of Unit 14(C).

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 251

EFFECT OF THE PROPOSAL: Reauthorize the antlerless portion of the any-moose drawing permit in the upper Ship Creek drainage in Unit 14(C).

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Department proposal. See issue statement.

PROPOSAL 252

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in portion of 15A, the Skilak Loop Management Area.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal.

PROPOSAL 253

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in a portion of Unit 15C.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal-see issue statement.

PROPOSAL 254

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose season in Unit 16B, Kalgin Island.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal-see issue statement.

PROPOSAL 255

EFFECT OF THE PROPOSAL: Reauthorize the brown bear tag fee exemptions in Region IV.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal-see issue statement.

PROPOSAL 260

EFFECT OF THE PROPOSAL: Liberalize the brown bear season in Unit 9B.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This proposal is a companion to Proposal 238. The department submitted this proposal to offer the Board an opportunity to consider changes to the brown bear management in Unit 9(B) when it reviews intensive management options to increase harvest of moose in the same Unit. The proposal is the product of an agenda change request submitted by the department and approved by the Board after the November 2011 Board of Game meeting in Barrow.